



United States  
Department of  
Agriculture

In cooperation with  
Minnesota Agricultural  
Experiment Station

# Soil Survey of Red Lake County, Minnesota



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Natural  
Resources  
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# How To Use This Soil Survey

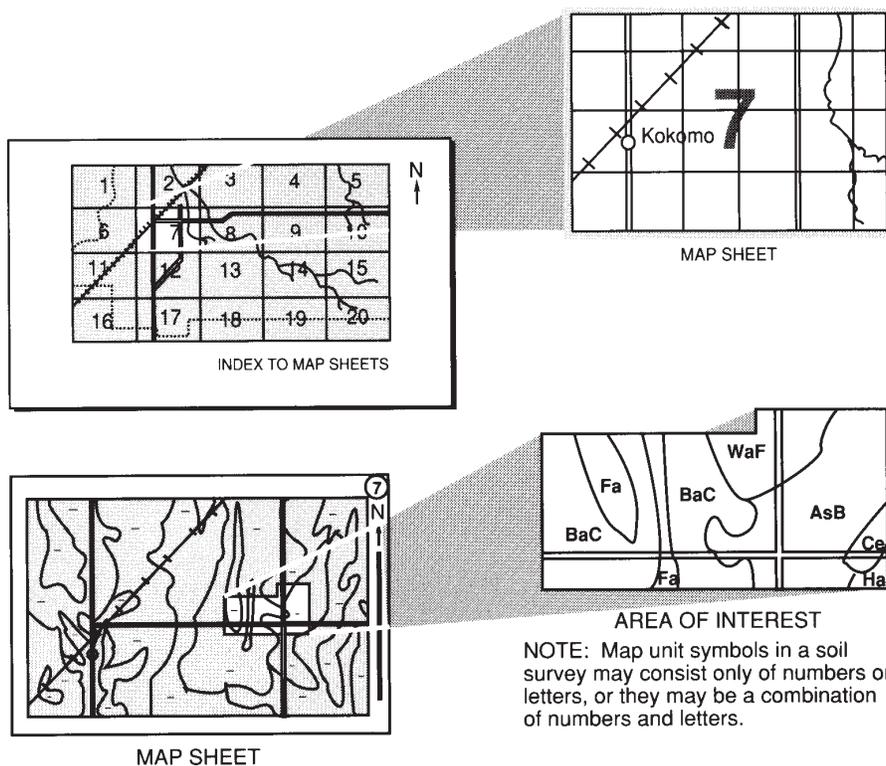
## Soil Maps

The soil maps can be useful in planning the use and management of small areas.

To find information about your area of interest, locate that area on the **Index to Map Sheets**. Note the number of the map sheet and turn to that sheet.

Locate your area of interest on the map sheet. Note the map unit symbols that are in that area. Turn to the **Contents**, which lists the map units by symbol and name and shows the page where each map unit is described. The map symbols and map unit names also appear as bookmarks, which link directly to the appropriate page in the publication.

The **Contents** shows which table has data on a specific land use for each detailed soil map unit. Also see the **Contents** for sections of this publication that may address your specific needs.



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This soil survey is a publication of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (formerly the Soil Conservation Service) has leadership for the Federal part of the National Cooperative Soil Survey.

Major fieldwork for this soil survey was completed in 2000. Soil names and descriptions were approved in 2001. Unless otherwise indicated, statements in this publication refer to conditions in the survey area in 2000. This survey was made cooperatively by the Natural Resources Conservation Service and the Minnesota Agricultural Experiment Station. Red Lake County provided partial funding for the survey, and other assistance was provided by the Minnesota Agricultural Extension Service. The survey is part of the technical assistance furnished to the Red Lake County Soil and Water Conservation District.

Soil maps in this survey may be copied without permission. Enlargement of these maps, however, could cause misunderstanding of the detail of mapping. If enlarged, maps do not show the small areas of contrasting soils that could have been shown at a larger scale.

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**Cover: A farmstead north of Terrebonne in Red Lake County. Soils in this area formed mostly in sandy glacial lake deposits and developed under prairie vegetation.**

*Additional information about the Nation's natural resources is available online from the Natural Resources Conservation Service at <http://www.nrcs.usda.gov>.*

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# Foreword

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This soil survey contains information that affects land use planning in this survey area. It contains predictions of soil behavior for selected land uses. The survey also highlights soil limitations, improvements needed to overcome the limitations, and the impact of selected land uses on the environment.

This soil survey is designed for many different users. Farmers, foresters, and agronomists can use it to evaluate the potential of the soil and the management needed for maximum food and fiber production. Planners, community officials, engineers, developers, builders, and home buyers can use the survey to plan land use, select sites for construction, and identify special practices needed to ensure proper performance. Conservationists, teachers, students, and specialists in recreation, wildlife management, waste disposal, and pollution control can use the survey to help them understand, protect, and enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. The information in this report is intended to identify soil properties that are used in making various land use or land treatment decisions. Statements made in this report are intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are shallow to bedrock. Some are too unstable to be used as a foundation for buildings or roads. A high water table makes a soil poorly suited to basements or underground installations.

These and many other soil properties that affect land use are described in this soil survey. The location of each soil is shown on the soil maps. Each soil in the survey area is described, and information on specific uses is given. Help in using this publication and additional information are available at the local office of the Natural Resources Conservation Service or the Cooperative Extension Service.

William Hunt  
State Conservationist  
Natural Resources Conservation Service

## Where To Get Updated Information

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The soil properties and interpretations included in this survey were current as of July 2003. The most current information is available through the Natural Resources Conservation Service Soil Data Mart Website at <http://soildatamart.nrcs.usda.gov/>.

Additional information is available from the Natural Resources Conservation Service Field Office Technical Guide at Red Lake Falls, Minnesota, or online at [www.nrcs.usda.gov/technical/efotg](http://www.nrcs.usda.gov/technical/efotg). The data in the Field Office Technical Guide are updated periodically.

Additional information about soils and about NRCS is available through the Minnesota NRCS Web page at [www.mn.nrcs.usda.gov](http://www.mn.nrcs.usda.gov).

For further information, please contact:

USDA, Natural Resources Conservation Service  
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Phone: 218-253-2593

# Soil Survey of Red Lake County, Minnesota

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Fieldwork by Richard Bednarek, Rodney Heschke, David Potts, Perry Sullivan, and Patricia Wright-Koll, Natural Resources Conservation Service, and Patty Burns, soil survey contractor

United States Department of Agriculture, Natural Resources Conservation Service, in cooperation with the Red Lake Soil and Water Conservation District, the Minnesota Agricultural Experiment Station, and the Minnesota Cooperative Extension Service

RED LAKE COUNTY is in northwestern Minnesota (fig. 1). It is bordered by Polk County on the west, south, and east and by Pennington County on the north. The total land area in Red Lake County is 277,000 acres, or 432 square miles. The county seat is Red Lake Falls, which is in the center of the county.

## General Nature of the Survey Area

This section provides some general information about Red Lake County. It describes history; industry, transportation facilities, and recreation; physiography, drainage, and geology; and climate.

## History

Red Lake County was established on December 24, 1896. It was named for the Red Lake River, which flows through the county and meets the Clearwater River at Red Lake Falls. The county includes 13 townships; the incorporated towns of Plummer, Oklee, Brooks, and Red Lake Falls; and the villages of Huot, Dorothy, and Terrebonne.

In 1863, a treaty signed with the Red Lake and Pembina band of the Chippewa opened up 3 million acres of land in the Red River Valley for settlement. The treaty was signed at what was known as the "Old Crossing" of the Red Lake River, which is near the town of Huot. This site is now a State park.

Pierre Bottineau, an explorer and guide in northwestern Minnesota, founded the settlement of Red Lake Falls in 1876. The western part of Red Lake County was settled primarily by French Canadians. The towns of Oklee, Plummer, and Brooks were established along the route of the Soo Line Railroad in the early 1900s. Scandinavian and French families settled in the eastern part of the county. Later, a mix of other nationalities, including German, English, and Native American, inhabited the county (Red Lake County Historical Society, 1976).

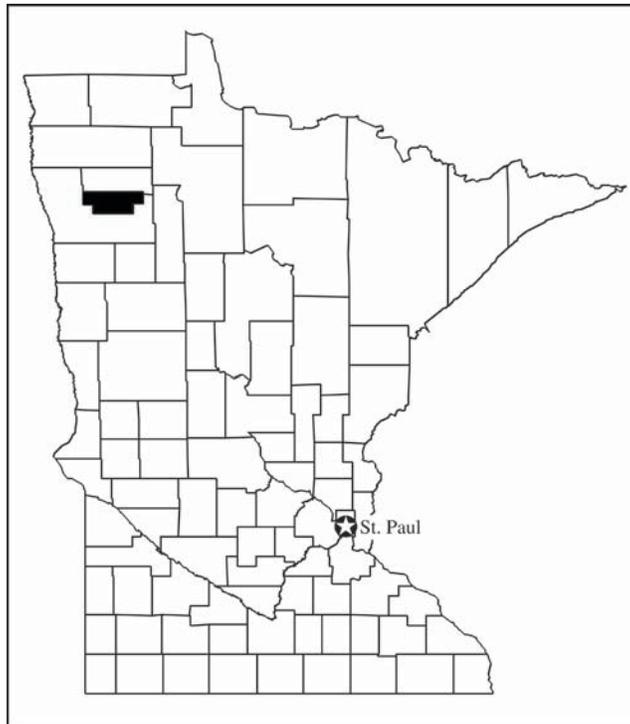


Figure 1.—Location of Red Lake County in Minnesota.

## Industry, Transportation Facilities, and Recreation

Farming is the main economic enterprise in the survey area. About 79 percent of the county is used as cropland or pasture. In addition to cash crops, dairy and beef cattle operations are important in the county.

Red Lake County was first traversed by oxcarts along the Pembina Trail. This trail follows a gravel ridge on the western edge of the county. The first railroads were built in the 1870s. Three railroads were operating in the county by the early 1900s.

U.S. Highway 59 cuts through the middle of the county and runs north and south. The towns of Plummer and Brooks are along Highway 59. Red Lake Falls is along State Highway 32, which also runs north and south. State Road 92 runs east and west and connects the towns of Oklee and Brooks. It joins Highway 32 south of Red Lake Falls. There are also several paved and unpaved county roads.

Boating, fishing, and snowmobiling are popular recreational activities in the county. Two large rivers, the Red Lake River and the Clearwater River, provide water-related recreational opportunities. Tubing the Red Lake River is a popular summertime activity. In the winter, a network of snowmobile trails is maintained in the county.

## Physiography, Drainage, and Geology

All of the soils in the survey area were influenced by Glacial Lake Agassiz and the glaciers that preceded its formation. About 12,000 years ago, Glacial Lake Agassiz was formed when the glacier started to retreat and left behind accumulations of drift (boulders, stones, and earthy materials). These accumulations are called moraines. The moraines blocked drainage outlets, and the lake grew. As the glacier continued to melt in the north, outlet routes were opened and Lake Agassiz eventually dried up. As the lake fell in stages, wave action deposited sand and gravel along the edges of the

lake and formed beach ridges. Some of these beach ridges run through Red Lake County. One obvious one is in the western part of the county in Wylie and Louisville Townships along County Road 3. The wind-driven waves of Lake Agassiz deposited sediments over the clayey and loamy till. Very fine sand and silt particles were deposited in the calmer waters of the interbeach areas. In much of the eastern part of the survey area, glacial lake deposits are thin and the till is at or near the surface (Sims and Morey, 1972; Harris, 1987).

Most of the survey area has an elevation of 1,000 to 1,100 feet above sea level. The highest elevation, 1,185 feet, is in the southeastern part of the county, bordering Polk County. The elevation is as low as 975 feet on the western edge of the county. The greatest areas of relief are along the Red Lake and Clearwater Rivers in the west and central parts of the county. The city of Red Lake Falls is at an elevation of 1,045 feet.

The survey area is drained by two large rivers and several streams. These watercourses flow primarily from east to west. The two main watersheds are the Red Lake and Clearwater Rivers. The Black River, the Little Black River, Brown's Creek, and Cyr Creek make up the Red Lake watershed within Red Lake County. The Lost River, the Poplar River, the Hill River, Badger Creek, Brooks Creek, and Terrebonne Creek are included in the Clearwater River watershed. Rivers move and deposit material and carve out the valleys and steep terraces that make Red Lake County a unique and scenic area in northwestern Minnesota (International Coalition, 1990).

## Climate

Tables 1a and 1b give data on temperature and precipitation for the survey area. The data in table 1a were recorded at Oklee during the period from 1961 to 1990. The data in table 1b were recorded at Red Lake Falls during the period from 1971 to 2000. Table 2 shows probable dates of the first freeze in fall and the last freeze in spring. Table 3 provides data on length of the growing season.

In winter, the average temperature is about 6 degrees F and the average daily minimum temperature is about -4 degrees. In summer, the average temperature is about 66 degrees and the average daily maximum temperature is about 78 degrees.

Growing degree days are shown in table 1a. They are equivalent to "heat units." During the month, growing degree days accumulate by the amount that the average temperature each day exceeds a base temperature (40 degrees F). The normal monthly accumulation is used to schedule single or successive plantings of a crop between the last freeze in spring and the first freeze in fall.

The average total precipitation is about 23 inches. Most of the rainfall occurs between April and September. The average total annual snowfall is about 49 inches at Red Lake Falls and about 37 inches at Oklee.

## How This Survey Was Made

This survey was made to provide updated information about the soils and miscellaneous areas in the survey area, which is in Major Land Resource Areas 56 (Red River Valley of the North) and 88 (Northern Minnesota Glacial Lake Basins). Major land resource areas (MLRAs) are geographically associated land resource units that share a common land use, elevation and topography, climate, water, soils, and vegetation (USDA, 1981). Red Lake County is a subset of MLRAs 56 and 88. Map unit design and the detailed soil descriptions are based on the occurrence of each soil throughout the MLRA. In some places in this publication, a soil may be referred to that was not mapped in the Red Lake County subset but that is representative of the MLRA.

This survey updates an earlier survey of the Red River Valley Area (Nikiforoff, 1939). The current survey provides more information and has larger maps, which show the soils in greater detail.

The information in this survey includes a brief description of the soils and miscellaneous areas and interpretive tables showing soil properties and the subsequent effects on suitability, limitations, and management for specified uses. During the fieldwork for this survey, soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They dug many holes to study the soil profile, which is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

The soils and miscellaneous areas in the survey area are in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landscape or segment of the landscape. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landscape, soil scientists develop a concept, or model, of how the soils were formed. Thus, during mapping, this model enables the soil scientists to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Individual soils on the landscape commonly merge into one another as their characteristics gradually change. To construct an accurate map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they observed. The maximum depth of observation was about 80 inches (6.7 feet). Soil scientists noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, soil reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Interpretations are modified as necessary to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a zone in which the soil moisture status is wet within certain depths in most years, but they cannot predict that this zone will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

The descriptions, names, and delineations of the soils in this county may not fully agree with those of the soils in adjacent survey areas. Differences are the result of a better knowledge of soils, modifications in series concepts, or variations in the intensity of mapping or in the extent of the soils in the survey areas.

Table 1a.--Temperature and Precipitation  
(Recorded in the period 1961-90 at Oklee, Minnesota)

Month	Temperature						Precipitation				
	Average daily maximum	Average daily minimum	Average	2 years in 10 will have--		Average number of growing degree days*	Average	2 years in 10 will have--		Average number of days with 0.10 inch or more	Average snowfall
				Maximum temperature higher than--	Minimum temperature lower than--			Less than--	More than--		
°F	°F	°F	°F	°F	Units	In	In	In		In	
January----	13.0	-8.4	2.3	39	-37	0	0.65	0.23	1.05	2	7.9
February---	21.5	-.9	10.3	45	-35	0	.42	.14	.67	1	5.2
March-----	34.3	13.3	23.8	59	-23	8	.94	.47	1.48	2	7.2
April-----	53.0	29.7	41.3	80	2	136	1.70	.65	2.69	4	2.5
May-----	67.8	41.7	54.8	88	22	441	2.70	1.27	3.93	5	.1
June-----	75.6	50.7	63.2	91	34	682	3.70	1.94	5.25	6	.0
July-----	81.3	55.1	68.2	95	39	875	3.60	1.90	5.08	6	.0
August-----	79.8	52.8	66.3	96	34	794	3.29	1.84	4.58	5	.0
September--	68.3	42.8	55.5	90	23	462	2.82	1.11	4.26	5	.0
October----	54.8	32.1	43.5	80	12	175	1.83	.54	2.88	3	1.1
November---	34.5	16.7	25.6	63	-16	17	.67	.25	1.06	2	5.3
December---	19.0	.0	9.5	46	-33	0	.72	.47	1.00	3	8.1
Yearly:											
Average---	50.2	27.1	38.7	---	---	---	---	---	---	---	---
Extreme---	101	-43	---	98	-43	---	---	---	---	---	---
Total-----	---	---	---	---	---	3,591	23.04	13.40	27.98	44	37.4

\* A growing degree day is a unit of heat available for plant growth. It can be calculated by adding the maximum and minimum daily temperatures, dividing the sum by 2, and subtracting the temperature below which growth is minimal for the principal crops in the area (40 degrees F).

Table 1b.--Temperature and Precipitation  
 (Recorded in the period 1971-2000 at Red Lake Falls, Minnesota)

Month	Temperature				Precipitation			
	Average daily maximum	Average daily minimum	Average	Average	30% chance of having--		Average number of days with 0.10 inch or more	Average snowfall
					Less than--	More than--		
	°F	°F	°F	In	In	In		In
January----	14.5	-5.6	4.4	0.66	0.41	0.80	1	11.1
February---	21.5	1.5	11.5	.54	.28	.67	1	8.1
March-----	35.1	16.3	25.7	.93	.45	1.13	2	8.1
April-----	54.4	31.2	42.8	1.36	.61	1.69	3	2.2
May-----	69.6	43.8	56.7	2.50	1.44	3.04	5	.1
June-----	77.1	52.5	64.8	3.77	2.41	4.55	6	.0
July-----	81.3	56.8	69.1	3.48	2.20	4.20	6	.0
August-----	80.0	54.5	67.3	3.59	2.50	4.26	7	.0
September--	69.0	44.7	56.8	2.60	1.32	3.17	4	.0
October----	55.3	33.4	44.3	1.86	.75	2.25	4	.9
November---	33.9	17.7	25.8	1.08	.45	1.33	3	9.6
December---	19.5	1.6	10.5	.49	.30	.60	1	8.6
Yearly:								
Average---	50.9	29.0	40.0	---	---	---	---	---
Total-----	---	---	---	22.86	19.01	24.37	43	48.6

Table 2.--Freeze Dates in Spring and Fall

(Recorded in the period 1961-90 at Oklee and Red Lake Falls,  
Minnesota)

Probability	Temperature		
	24 °F or lower	28 °F or lower	32 °F or lower
<b>OKLEE:</b>			
Last freezing temperature in spring:			
1 year in 10 later than--	May 11	May 19	June 3
2 years in 10 later than--	May 5	May 14	May 29
5 years in 10 later than--	Apr. 22	May 5	May 18
First freezing temperature in fall:			
1 year in 10 earlier than--	Sept. 21	Sept. 10	Sept. 5
2 years in 10 earlier than--	Sept. 25	Sept. 15	Sept. 10
5 years in 10 earlier than--	Oct. 4	Sept. 23	Sept. 18
<b>RED LAKE FALLS:</b>			
Last freezing temperature in spring:			
1 year in 10 later than--	May 7	May 21	May 28
2 years in 10 later than--	May 1	May 15	May 24
5 years in 10 later than--	Apr. 20	May 4	May 15
First freezing temperature in fall:			
1 year in 10 earlier than--	Sept. 25	Sept. 13	Sept. 5
2 years in 10 earlier than--	Sept. 30	Sept. 19	Sept. 11
5 years in 10 earlier than--	Oct. 10	Sept. 29	Sept. 21

Table 3.--Growing Season

(Recorded in the period 1961-90 at Oklee and Red Lake Falls, Minnesota)

Probability	Daily minimum temperature during growing season		
	Higher than 24 °F	Higher than 28 °F	Higher than 32 °F
	Days	Days	Days
<b>OKLEE:</b>			
9 years in 10	140	125	100
8 years in 10	148	131	108
5 years in 10	164	140	123
2 years in 10	180	150	138
1 year in 10	189	155	146
<b>RED LAKE FALLS:</b>			
9 years in 10	144	124	104
8 years in 10	153	132	112
5 years in 10	169	146	127
2 years in 10	185	161	143
1 year in 10	194	169	151



# Formation and Classification of the Soils

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This section relates the soils in the survey area to the major factors of soil formation and describes the system of soil classification.

## Factors of Soil Formation

Soils formed as a result of the interaction of five major factors—parent material, climate, plants and animals, relief, and time. Climate and plants and animals are the active factors of soil formation. Their effects are conditioned by relief and time as they act on the parent material. These factors slowly change the parent material into a natural body that has genetically related horizons. This natural body is known as soil.

## Parent Material

The parent material in most of Red Lake County was derived from the calcareous, loamy till deposited during the last glaciation. This till was later modified and reworked by Glacial Lake Agassiz, which covered the county after the glacier receded. Surface geology in Red Lake County is primarily related to the Lake Agassiz shoreline complex. The shoreline area of Glacial Lake Agassiz is made up of flat, crossbedded silt, sand, and gravel and areas of wave-eroded glacial sediment. The beach ridges of Lake Agassiz are included in this shoreline complex.

In western Red Lake County, glacial sediment consists of clay that contains small amounts of gravel. In places, the clayey deposits also contain cobbles and boulders that were deposited around 13,000 years ago by a south-flowing glacier. Most surface exposures of this material are 2 to 15 feet thick, but the thickness ranges to as much as 70 feet. This till is known as the Huot Formation.

There are several surface exposures of silty till deposited about 13,500 years ago by a south-flowing glacier. This till contains more sand and less clay than that of the Huot Formation. Inclusions of sand and gravel are common. This formation consists primarily of glacial sediments but contains some lake and stream deposits. Typically, the thickness of this till ranges from 15 to 30 feet. The thickness of some deposits, however, ranges from 7 to 70 feet. This formation is known as the Red Lake Falls Formation.

Sand, gravelly sand, and gravel were deposited in depressions and river channels about 9,900 to 11,000 years ago. The thickness of this material ranges from 2 to 20 feet. These deposits are called the Poplar River Formation.

Recent alluvium is deposited on the flood plains along rivers and streams. This material ranges from sand to silty clay loam (Harris, 1987; Harris and others, 1974).

## Climate

Climate has affected the formation of soils in Red Lake County. The parent material of these soils originated in a climate that produced continental glaciers.

When the climate warmed and the glaciers receded and melted, the area was covered by Glacial Lake Agassiz. Eventually, as the climate stabilized to its present temperatures, the glacial lake drained.

As a soil-forming factor, climate affects the physical, chemical, and biological characteristics of the soil. Red Lake County has a cool, subhumid climate that has wide variations in temperature from summer to winter. During the long winter, when the soil is frozen to a depth of 3 to 5 feet for 6 months of the year, the soil-forming processes are dormant except for the effects of frost action.

The climate affects the type of native vegetation, which in turn affects soil formation.

## **Living Organisms**

The soils of Red Lake County formed in a transitional zone between areas of prairie vegetation and areas of mixed hardwoods. Soils that formed in such a transitional zone exhibit features of soils that formed under both types of vegetation because of past fluctuations of the prairie-forest border (Wright, 1972). Some of the native tall-grass prairie plants are big bluestem, indiagrass, prairie cordgrass, and needleandthread. Reeds, sedges, and cattails are common in marshy areas. Soils that formed under prairie vegetation have a high content of organic matter. The decaying plants created nitrogen for plant growth. Nearly all of the soils in the county have a thick dark surface layer (6 to 12 inches thick) resulting from the influence of prairie vegetation.

The mixed hardwood influence of bur oak and quaking aspen is primarily apparent east of the Red Lake River. Soluble nutrients and clay particles were transported downward in the soil profile by precipitation. As a result, a layer of clay accumulated below the surface layer. Smiley, Reiner, and Linveldt soils are examples of soils that formed under mixed hardwoods.

Thousands of organisms occur in the top few inches of soil. These organisms influence soil formation. The level of living organisms in the soil is one indication of soil quality. Micro-organisms, such as bacteria and fungi, aid in the decomposition of organic material. Protozoa and nematodes increase soil fertility by releasing nutrients in plant-available forms. Arthropods, such as ants, beetles, springtails, centipedes, spiders, and mites, improve soil structure and fertility through the shredding of plant litter and the release of fecal pellets. Earthworms and burrowing animals help to aerate and mix the soil material (USDA, 1999).

Human activity can affect soil formation. Some building and farming practices can accelerate erosion. Applications of fertilizer and manure change the content of organic matter and the levels of nutrients. The soil's granular structure can be altered through compaction by heavy equipment. Artificial drainage modifies the natural water and soil patterns and thus affects the type of plants that can grow.

## **Topography**

The effects of relief on soil formation in the survey area are minimal. Most of the soils are nearly level, except along the rivers and beach ridges. The areas of higher relief are subject to greater erosion. Several areas of sand, very fine sand, and silt deposits along rivers are subject to gully erosion resulting from spring runoff. Glyndon, Fairdale, and Flaming soils are examples of soils in these areas. Soils on prominent sandy ridges, such as Sandberg, Radium, and Poppleton soils, are susceptible to wind erosion.

## **Time**

Geologically, all of the soils in Red Lake County are young. The soil-forming processes have been active for 9,000 to 13,000 years. The parent material was deposited by the most recent glaciers and by subsequent stages of Glacial Lake

Agassiz. Alluvium from rivers and streams is deposited each year. Periodic flooding moves and deposits soil material. The soils that formed in these areas have had very little time to develop.

## Classification of the Soils

The system of soil classification used by the National Cooperative Soil Survey has six categories (Soil Survey Staff, 1998 and 1999). Beginning with the broadest, these categories are the order, suborder, great group, subgroup, family, and series. Classification is based on soil properties observed in the field or inferred from those observations or from laboratory measurements. Table 4 shows the classification of the soils in the survey area. The categories are defined in the following paragraphs.

**ORDER.** Twelve soil orders are recognized. The differences among orders reflect the dominant soil-forming processes and the degree of soil formation. Each order is identified by a word ending in *sol*. An example is Mollisol. More than half of the soils in Red Lake County are Mollisols.

**SUBORDER.** Each order is divided into suborders primarily on the basis of properties that influence soil genesis and are important to plant growth or properties that reflect the most important variables within the orders. The last syllable in the name of a suborder indicates the order. An example is Aquoll (*Aqu*, meaning water, plus *oll*, from Mollisol).

**GREAT GROUP.** Each suborder is divided into great groups on the basis of close similarities in kind, arrangement, and degree of development of pedogenic horizons; soil moisture and temperature regimes; and base status. Each great group is identified by the name of a suborder and by a prefix that indicates a property of the soil. An example is Endoaquolls (*Endo*, meaning within, plus *aquoll*, the suborder of the Mollisols that has an aquic moisture regime).

**SUBGROUP.** Each great group has a typic subgroup. Other subgroups are intergrades or extragrades. The typic is the central concept of the great group; it is not necessarily the most extensive. Intergrades are transitions to other orders, suborders, or great groups. Extragrades have some properties that are not representative of the great group but do not indicate transitions to any other known kind of soil. Each subgroup is identified by one or more adjectives preceding the name of the great group. The adjective Typic identifies the subgroup that typifies the great group. An example is Typic Endoaquolls.

**FAMILY.** Families are established within a subgroup on the basis of physical and chemical properties and other characteristics that affect management. Generally, the properties are those of horizons below plow depth where there is much biological activity. Among the properties and characteristics considered are particle-size class, mineralogy class, cation-exchange activity class, soil temperature regime, soil depth, and reaction class. A family name consists of the name of a subgroup preceded by terms that indicate soil properties. An example is fine-loamy, mixed, superactive, calcareous, frigid Typic Endoaquolls.

**SERIES.** The series consists of soils that have similar horizons in their profile. The horizons are similar in color, texture, structure, reaction, consistence, mineral and chemical composition, and arrangement in the profile. The texture of the surface layer or of the substratum can differ within a series. The soils of the Roliss series are fine-loamy, mixed, superactive, calcareous, frigid Typic Endoaquolls.

The Official Soil Series Descriptions (OSDs) provide the most current information about the series mapped in Red Lake County. These descriptions are available on the Web at <http://soils.usda.gov>.

Table 4.--Classification of the Soils

Soil name	Family or higher taxonomic class
Augsburg-----	Coarse-silty over clayey, mixed over smectitic, superactive, frigid Typic Calciaquolls
Berner-----	Loamy, mixed, euic, frigid Terric Haplosaprists
Boash-----	Clayey over loamy, smectitic over mixed, superactive, calcareous, frigid Vertic Endoaquolls
Borup-----	Coarse-silty, mixed, superactive, frigid Typic Calciaquolls
Bowstring-----	Euic, frigid Fluvaquentic Haplosaprists
Boyerlake-----	Fine, smectitic, frigid Vertic Eutrudepts
Cathro-----	Loamy, mixed, euic, frigid Terric Haplosaprists
Chilgren-----	Fine-loamy, mixed, superactive, frigid Typic Endoaqualfs
Clearwater-----	Fine, smectitic, frigid Typic Epiaquerts
Deerwood-----	Sandy, mixed, frigid Histic Humaquepts
Dora-----	Clayey, smectitic, euic, frigid Terric Haplosaprists
Eckvoll-----	Loamy, mixed, superactive, frigid Aquic Arenic Hapludalfs
Espolie-----	Sandy over clayey, mixed over smectitic, frigid Typic Epiaquolls
Fairdale-----	Fine-loamy, mixed, superactive, calcareous, frigid Mollic Udifluvents
Flaming-----	Sandy, mixed, frigid Oxyaquic Hapludolls
Fluvaquents-----	Fluvaquents
Foldahl-----	Sandy over loamy, mixed, superactive, frigid Oxyaquic Hapludolls
Foxhome-----	Sandy-skeletal over loamy, mixed, superactive, frigid Oxyaquic Hapludolls
Foxlake-----	Fine, smectitic, frigid Vertic Epiaquolls
Fram-----	Coarse-loamy, mixed, superactive, frigid Aeris Calciaquolls
Garborg-----	Sandy, mixed, frigid Typic Endoaquolls
Garnes-----	Fine-loamy, mixed, superactive, frigid Aquic Hapludalfs
Glyndon-----	Coarse-silty, mixed, superactive, frigid Aeris Calciaquolls
Grimstad-----	Sandy over loamy, mixed, superactive, frigid Aeris Calciaquolls
Grygla-----	Sandy over loamy, mixed, superactive, nonacid, frigid Mollic Endoaquents
Halverson-----	Loamy, mixed, superactive, frigid Arenic Argiudolls
Hamar-----	Sandy, mixed, frigid Typic Endoaquolls
Hamerly-----	Fine-loamy, mixed, superactive, frigid Aeris Calciaquolls
Hamre-----	Fine-loamy, mixed, superactive, nonacid, frigid Histic Humaquepts
Hangaard-----	Sandy, mixed, frigid Typic Endoaquolls
Hapludalfs-----	Hapludalfs
Hapludolls-----	Hapludolls
Hattie-----	Fine, smectitic, frigid Aquic Hapluderts
Haug-----	Coarse-loamy, mixed, superactive, calcareous, frigid Histic Humaquepts
Hedman-----	Coarse-loamy, mixed, superactive, frigid Typic Calciaquolls
Hilaire-----	Sandy over clayey, mixed over smectitic, frigid Oxyaquic Hapludolls
Huot-----	Sandy over clayey, mixed over smectitic, frigid Aquic Calciudolls
Karlsruhe-----	Sandy, mixed, frigid Aeris Calciaquolls
Kittson-----	Fine-loamy, mixed, superactive, frigid Oxyaquic Hapludolls
Kratka-----	Sandy over loamy, mixed, superactive, frigid Typic Endoaquolls
Lamoure-----	Fine-silty, mixed, superactive, calcareous, frigid Cumulic Endoaquolls
Linveltd-----	Coarse-loamy, mixed, superactive, frigid Oxyaquic Argiudolls
Maddock-----	Sandy, mixed, frigid Entic Hapludolls
Markey-----	Sandy or sandy-skeletal, mixed, euic, frigid Terric Haplosaprists
Marquette-----	Loamy-skeletal, mixed, superactive, frigid Inceptic Hapludalfs
Mavie-----	Sandy-skeletal over loamy, mixed, superactive, frigid Typic Calciaquolls
Newfolden-----	Clayey over loamy, smectitic over mixed, superactive, frigid Oxyaquic Argiudolls
Northwood-----	Sandy over loamy, mixed, superactive, nonacid, frigid Histic Humaquepts
Oylen-----	Coarse-loamy, mixed, superactive, frigid Oxyaquic Argiudolls
Pelan-----	Loamy-skeletal, mixed, superactive, frigid Oxyaquic Hapludalfs
Poppleton-----	Mixed, frigid Aquic Udipsamments
Radium-----	Sandy, mixed, frigid Oxyaquic Hapludolls
Rauville-----	Fine-silty, mixed, superactive, calcareous, frigid Cumulic Endoaquolls
Reiner-----	Fine-loamy, mixed, superactive, frigid Oxyaquic Argiudolls
Reis-----	Fine, smectitic, frigid Typic Calciaquerts
Roliss-----	Fine-loamy, mixed, superactive, calcareous, frigid Typic Endoaquolls
Rosewood-----	Sandy, mixed, frigid Typic Calciaquolls
Sandberg-----	Sandy, mixed, frigid Calcic Hapludolls
Seelyeville-----	Euic, frigid Typic Haplosaprists
Sioux-----	Sandy-skeletal, mixed, frigid Entic Hapludolls
Smiley-----	Fine-loamy, mixed, superactive, frigid Typic Argiaquolls
Strandquist-----	Sandy-skeletal over loamy, mixed, superactive, calcareous, frigid Typic Endoaquolls
Strathcona-----	Sandy over loamy, mixed, superactive, frigid Typic Calciaquolls

Table 4.--Classification of the Soils--Continued

Soil name	Family or higher taxonomic class
Syrene-----	Sandy, mixed, frigid Typic Calciaquolls
Thiefriever-----	Sandy over clayey, mixed over smectitic, frigid Typic Calciaquolls
Udipsamments-----	Udipsamments
Ulen-----	Sandy, mixed, frigid Aeric Calciaquolls
Vallars-----	Fine-loamy, mixed, superactive, frigid Typic Calciaquolls
Venlo-----	Sandy, mixed, frigid Typic Endoaquolls
Wheatville-----	Coarse-silty over clayey, mixed over smectitic, superactive, frigid Aeric Calciaquolls
Wyandotte-----	Sandy over clayey, mixed over smectitic, frigid Typic Calciaquolls
Zell-----	Coarse-silty, mixed, superactive, frigid Typic Calciudolls



# Soil Map Unit Descriptions

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In this section, arranged in numerical order, are the soil map unit descriptions for the soil series mapped in Red Lake County.

Characteristics of the soil and the material in which it formed are identified for each soil series. A brief description of the soil profile is provided in the map unit descriptions. For more information about a soil series, the official series description can be viewed or downloaded from the Web. These series descriptions follow standards in the “Soil Survey Manual” (Soil Survey Division Staff, 1993). Many of the technical terms used in the descriptions are defined in “Keys to Soil Taxonomy” (Soil Survey Staff, 1998).

The map units on the soil maps in this survey represent the soils or miscellaneous areas in the survey area. These soils or miscellaneous areas are listed as individual components in the map unit descriptions. The map unit descriptions in this section, along with the maps, can be used to determine the suitability and potential of a unit for specific uses. They also can be used to plan the management needed for those uses. More information about each map unit is provided in the tables (see Contents).

A map unit delineation on the soil maps represents an area on the landscape. It is identified by differences in the properties and taxonomic classification of components and by the percentage of each component in the map unit.

Components that are dissimilar, or contrasting, are identified in the map unit description. Dissimilar components are those that have properties and behavioral characteristics divergent enough from those of the major components to affect use or to require different management. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps.

Components that are similar to the major components (noncontrasting) are not identified individually in the map unit description. Similar components are those that have properties and behavioral characteristics similar enough to those of the major components that they do not affect use or require different management.

The presence of multiple components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into segments that have similar use and management requirements. The delineation of such landscape segments on the map provides sufficient information for the development of resource plans, but if intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol is used for each map unit on the soil maps. This symbol precedes the map unit name in the map unit descriptions. Each description includes general information about the unit. The map unit descriptions include representative values in feet and the months in which wet soil moisture status is highest and lowest in the soil profile and ponding is shallowest and deepest on the soil surface. They also include the classes of flooding and the months in which flooding is least and most likely to occur. Table 26 provides a complete display of this data for every month of the year. The available water capacity given in each map unit description is calculated for all horizons in the soil profile. The organic matter content displayed in each map unit

description is calculated for all horizons in the soil profile, except those that represent the surface duff layer on forested soils. Table 24 provides a complete display of available water capacity and organic matter content by horizon.

The principal hazards and limitations to be considered in planning for specific uses are described in other sections of this survey.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer or of the underlying layers, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer or of the underlying layers. They also can differ in slope, stoniness, salinity, wetness, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. The name of a soil phase commonly indicates a feature that affects use or management. For example, Smiley mucky loam, depressional, 0 to 1 percent slopes, is a phase of the Smiley series.

A map unit is named for the component or components that make up a dominant percentage of the map unit. Many map units consist of one dominant component. These map units are consociations. Smiley loam, 0 to 2 percent slopes, is an example.

Some map units are made up of two or more dominant components. These map units are complexes or undifferentiated groups.

A *complex* consists of two or more components in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. Attempting to delineate the individual components of a complex would result in excessive clutter that could make the map illegible. The pattern and proportion of the components are somewhat similar in all areas. Sandberg-Radium complex, 1 to 6 percent slopes, is an example.

An *undifferentiated group* is made up of two or more components that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the components in a mapped area are not uniform. An area can be made up of only one of the dominant components, or it can be made up of all of them. Berner, Rosewood, and Strathcona soils, seepy, 0 to 2 percent slopes, is an undifferentiated group in this survey area.

This survey includes miscellaneous areas. Such areas have little or no soil material and support little or no vegetation. The map unit Pits, gravel and sand, is an example.

Table 5 gives the acreage and proportionate extent of each map unit. Other tables (see Contents) give properties of the soils and the limitations, capabilities, and potentials for many uses. The Glossary defines many of the terms used in describing the soils or miscellaneous areas.

## **B109A—Bowstring and Fluvaquents soils, MLRA 88, 0 to 2 percent slopes, frequently flooded**

### **Component Description**

#### **Bowstring and similar soils**

*Extent:* 45 percent of the unit

*Geomorphic component:* Swales on flood plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Muck

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Organic material over alluvium

*Months in which flooding does not occur:* January, February, December

*Highest frequency of flooding:* Very frequent (April, May)  
*Shallowest depth to wet zone:* At the surface (March, April, May, June)  
*Deepest depth to wet zone:* 2.1 feet (February)  
*Shallowest ponding:* 0.3 foot (January, February, July, August, September, October, November, December)  
*Deepest ponding:* 0.5 foot (March, April, May, June)  
*Available water capacity to a depth of 60 inches:* 21.4 inches  
*Content of organic matter in the upper 10 inches:* 65 percent  
*Typical profile:*  
     Oa1,Oa2—0 to 38 inches; muck  
     Cg—38 to 47 inches; stratified sand to fine sandy loam  
     O'a—47 to 80 inches; muck

### **Fluvaquents and similar soils**

*Extent:* 40 percent of the unit  
*Geomorphic component:* Flats and swales on flood plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Very poorly drained  
*Parent material:* Alluvium  
*Months in which flooding does not occur:* January, February, December  
*Highest frequency of flooding:* Very frequent (April, May)  
*Shallowest depth to wet zone:* At the surface (March, April, May)  
*Deepest depth to wet zone:* 1.6 feet (February, August)  
*Shallowest ponding:* 0.5 foot (January, February, March, June, July, August, September, October, November, December)  
*Deepest ponding:* 0.7 foot (April, May)  
*Available water capacity to a depth of 60 inches:* 8.1 inches  
*Content of organic matter in the upper 10 inches:* 5 percent  
*Typical profile:*  
     A—0 to 16 inches; fine sandy loam  
     Cg—16 to 80 inches; stratified loamy sand to silt loam

### **Hapludalfs**

*Extent:* 5 percent of the unit  
*Geomorphic component:* Hillslopes in drainageways; escarpments in drainageways  
*Slope range:* 3 to 60 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Glaciolacustrine deposits and till  
*Months in which flooding does not occur:* January, February, December  
*Highest frequency of flooding:* Rare (March, April, May, June, September, October, November)  
*Shallowest depth to wet zone:* 2.5 feet (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 10.1 inches  
*Content of organic matter in the upper 10 inches:* 1.1 percent  
*Typical profile:*  
     A—0 to 6 inches; fine sandy loam  
     E—6 to 8 inches; fine sandy loam  
     Bt1,Bt2—8 to 25 inches; silty clay loam  
     C1,C2—25 to 80 inches; silt loam

**Seelyeville**

*Extent:* 5 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Muck

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Organic material

*Months in which flooding does not occur:* January, February, December

*Highest frequency of flooding:* Very frequent (April, May)

*Shallowest depth to wet zone:* At the surface (March, April, May)

*Deepest depth to wet zone:* 1.6 feet (February, August)

*Shallowest ponding:* 0.3 foot (January, February, July, August, September, October, November, December)

*Deepest ponding:* 0.5 foot (March, April, May, June)

*Available water capacity to a depth of 60 inches:* 25.1 inches

*Content of organic matter in the upper 10 inches:* 90 percent

*Typical profile:*

Oa1—0 to 10 inches; muck

Oa2-Oa5—10 to 80 inches; muck

**Water**

*Extent:* 5 percent of the unit

**Major Uses of the Map Unit**

- Wetland wildlife habitat

**B200A—Garnes fine sandy loam, 0 to 3 percent slopes****Component Description****Garnes and similar soils**

*Extent:* 70 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Moderately well drained

*Parent material:* Glaciolacustrine deposits and till

*Flooding:* None

*Shallowest depth to wet zone:* 2.5 feet (April)

*Deepest depth to wet zone:* 6.7 feet (transitory) (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 10 inches

*Content of organic matter in the upper 10 inches:* 1.1 percent

*Typical profile:*

Ap—0 to 6 inches; fine sandy loam

E—6 to 9 inches; loamy fine sand

Bt—9 to 14 inches; clay loam

Bk1,Bk2—14 to 72 inches; loam

C—72 to 80 inches; loam

**Chilgren**

*Extent:* 13 percent of the unit

*Geomorphic component:* Swales and flats on lake plains

*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 3.8 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, December  
*Deepest ponding:* 0.3 foot (April, May, June, September, October, November)  
*Available water capacity to a depth of 60 inches:* 9.9 inches  
*Content of organic matter in the upper 10 inches:* 1.1 percent  
*Typical profile:*  
     A—0 to 4 inches; fine sandy loam  
     E—4 to 10 inches; fine sandy loam  
     Btg—10 to 18 inches; clay loam  
     Bkg1,Bkg2—18 to 72 inches; loam  
     Cg—72 to 80 inches; loam

### **Eckvoll**

*Extent:* 5 percent of the unit  
*Geomorphic component:* Rises on lake plains  
*Slope range:* 0 to 3 percent  
*Texture of the surface layer:* Loamy fine sand  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 2.5 feet (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 8.3 inches  
*Content of organic matter in the upper 10 inches:* 1.9 percent  
*Typical profile:*  
     Ap—0 to 9 inches; loamy fine sand  
     E1,E2—9 to 25 inches; fine sand  
     2Bt—25 to 32 inches; sandy clay loam  
     2BCk,2C1,2C2—32 to 80 inches; loam

### **Garnes, very stony**

*Extent:* 5 percent of the unit  
*Geomorphic component:* Rises on lake plains  
*Slope range:* 1 to 4 percent  
*Texture of the surface layer:* Loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Glaciolacustrine deposits and till  
*Flooding:* None  
*Shallowest depth to wet zone:* 2.5 feet (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 10.1 inches  
*Content of organic matter in the upper 10 inches:* 1.1 percent

*Typical profile:*

- A—0 to 6 inches; loam
- E—6 to 9 inches; loamy fine sand
- Bt—9 to 14 inches; clay loam
- Bk1,Bk2—14 to 72 inches; loam
- C—72 to 80 inches; loam

**Grygla**

*Extent:* 4 percent of the unit

*Geomorphic component:* Flats and swales on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Loamy fine sand

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits and till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 4.1 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, September, December

*Deepest ponding:* 0.3 foot (April, May)

*Available water capacity to a depth of 60 inches:* 8.4 inches

*Content of organic matter in the upper 10 inches:* 1.8 percent

*Typical profile:*

- Ap—0 to 6 inches; loamy fine sand
- Bg—6 to 26 inches; fine sand
- 2Bkg-2Cg—26 to 80 inches; loam

**Pelan**

*Extent:* 3 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Moderately well drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 2.5 feet (April)

*Deepest depth to wet zone:* 6.7 feet (transitory) (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 8.5 inches

*Content of organic matter in the upper 10 inches:* 1.4 percent

*Typical profile:*

- Ap—0 to 6 inches; sandy loam
- E—6 to 9 inches; sand
- Bt—9 to 14 inches; very gravelly sandy loam
- Bw—14 to 20 inches; very gravelly coarse sand
- 2Bw—20 to 60 inches; loam

**Major Uses of the Map Unit**

- Hayland, pasture, woodland

## B201A—Chilgren fine sandy loam, 0 to 2 percent slopes

### Component Description

#### Chilgren and similar soils

*Extent:* 75 percent of the unit

*Geomorphic component:* Flats and swales on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 3.8 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, December

*Deepest ponding:* 0.3 foot (April, May, June, September, October, November)

*Available water capacity to a depth of 60 inches:* 9.9 inches

*Content of organic matter in the upper 10 inches:* 1.1 percent

*Typical profile:*

A—0 to 4 inches; fine sandy loam

E—4 to 10 inches; fine sandy loam

Btg—10 to 18 inches; clay loam

Bkg1,Bkg2—18 to 72 inches; loam

Cg—72 to 80 inches; loam

#### Garnes

*Extent:* 9 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Moderately well drained

*Parent material:* Glaciolacustrine deposits and till

*Flooding:* None

*Shallowest depth to wet zone:* 2.5 feet (April)

*Deepest depth to wet zone:* 6.7 feet (transitory) (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 10 inches

*Content of organic matter in the upper 10 inches:* 1.1 percent

*Typical profile:*

Ap—0 to 6 inches; fine sandy loam

E—6 to 9 inches; loamy fine sand

Bt—9 to 14 inches; clay loam

Bk1,Bk2—14 to 72 inches; loam

C—72 to 80 inches; loam

#### Grygla

*Extent:* 5 percent of the unit

*Geomorphic component:* Flats and swales on lake plains

*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Loamy fine sand  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits and till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 4.1 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, September, December  
*Deepest ponding:* 0.3 foot (April, May)  
*Available water capacity to a depth of 60 inches:* 8.4 inches  
*Content of organic matter in the upper 10 inches:* 1.8 percent  
*Typical profile:*  
     Ap—0 to 6 inches; loamy fine sand  
     Bg—6 to 26 inches; fine sand  
     2Bkg-2Cg—26 to 80 inches; loam

### **Grygla, depressional**

*Extent:* 5 percent of the unit  
*Geomorphic component:* Depressions on lake plains  
*Slope range:* 0 to 1 percent  
*Texture of the surface layer:* Mucky loamy fine sand  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Very poorly drained  
*Parent material:* Glaciolacustrine deposits and till  
*Flooding:* None  
*Shallowest depth to wet zone:* At the surface (March, April, May)  
*Deepest depth to wet zone:* 3 feet (February)  
*Shallowest ponding:* 0.2 foot (July, August, September)  
*Deepest ponding:* 0.3 foot (January, February, March, April, May, June, October, November, December)  
*Available water capacity to a depth of 60 inches:* 8.4 inches  
*Content of organic matter in the upper 10 inches:* 6.3 percent  
*Typical profile:*  
     Ap—0 to 6 inches; mucky loamy fine sand  
     Bg—6 to 26 inches; fine sand  
     2Bkg-2Cg—26 to 80 inches; loam

### **Hamre**

*Extent:* 5 percent of the unit  
*Geomorphic component:* Depressions on lake plains  
*Slope range:* 0 to 1 percent  
*Texture of the surface layer:* Muck  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Very poorly drained  
*Flooding:* None  
*Shallowest depth to wet zone:* At the surface (March, April, May)  
*Deepest depth to wet zone:* 2.5 feet (February)  
*Shallowest ponding:* 0.3 foot (July, August, September)  
*Deepest ponding:* 0.5 foot (January, February, March, April, May, June, October, November, December)  
*Available water capacity to a depth of 60 inches:* 13.3 inches  
*Content of organic matter in the upper 10 inches:* 85 percent

*Typical profile:*

- Oa—0 to 13 inches; muck
- A—13 to 18 inches; loam
- Bg—18 to 35 inches; loam
- BCg-Cg—35 to 80 inches; loam

**Pelan**

- Extent:* 1 percent of the unit
- Geomorphic component:* Rises on lake plains
- Slope range:* 0 to 3 percent
- Texture of the surface layer:* Sandy loam
- Depth to restrictive feature:* Very deep (more than 60 inches)
- Drainage class:* Moderately well drained
- Parent material:* Glaciolacustrine deposits over till
- Flooding:* None
- Shallowest depth to wet zone:* 2.5 feet (April)
- Deepest depth to wet zone:* 6.7 feet (transitory) (August)
- Ponding:* None
- Available water capacity to a depth of 60 inches:* 8.5 inches
- Content of organic matter in the upper 10 inches:* 1.4 percent
- Typical profile:*
  - Ap—0 to 6 inches; sandy loam
  - E—6 to 9 inches; sand
  - Bt—9 to 14 inches; very gravelly sandy loam
  - Bw—14 to 20 inches; very gravelly coarse sand
  - 2Bw—20 to 60 inches; loam

**Major Uses of the Map Unit**

- Hayland, pasture, woodland

**B202A—Cathro muck, depressional, MLRA 88, 0 to 1 percent slopes****Component Description****Cathro and similar soils**

- Extent:* 80 percent of the unit
- Geomorphic component:* Depressions on lake plains
- Slope range:* 0 to 1 percent
- Texture of the surface layer:* Muck
- Depth to restrictive feature:* Very deep (more than 60 inches)
- Drainage class:* Very poorly drained
- Parent material:* Organic material over till
- Flooding:* None
- Shallowest depth to wet zone:* At the surface (March, April, May, June)
- Deepest depth to wet zone:* 2.1 feet (February)
- Shallowest ponding:* 0.3 foot (January, February, July, August, September, October, November, December)
- Deepest ponding:* 0.5 foot (March, April, May, June)
- Available water capacity to a depth of 60 inches:* 15.9 inches
- Content of organic matter in the upper 10 inches:* 85 percent
- Typical profile:*
  - Oa1,Oa2—0 to 11 inches; muck

Oa3—11 to 23 inches; muck

Cg—23 to 60 inches; loam

### **Hamre**

*Extent:* 8 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Muck

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May)

*Deepest depth to wet zone:* 2.5 feet (February)

*Shallowest ponding:* 0.3 foot (July, August, September)

*Deepest ponding:* 0.5 foot (January, February, March, April, May, June, October, November, December)

*Available water capacity to a depth of 60 inches:* 13.3 inches

*Content of organic matter in the upper 10 inches:* 85 percent

*Typical profile:*

Oa—0 to 13 inches; muck

A—13 to 18 inches; loam

Bg—18 to 35 inches; loam

BCg-Cg—35 to 80 inches; loam

### **Chilgren**

*Extent:* 3 percent of the unit

*Geomorphic component:* Swales and flats on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 3.8 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, December

*Deepest ponding:* 0.3 foot (April, May, June, September, October, November)

*Available water capacity to a depth of 60 inches:* 9.9 inches

*Content of organic matter in the upper 10 inches:* 1.1 percent

*Typical profile:*

A—0 to 4 inches; fine sandy loam

E—4 to 10 inches; fine sandy loam

Btg—10 to 18 inches; clay loam

Bkg1,Bkg2—18 to 72 inches; loam

Cg—72 to 80 inches; loam

### **Northwood**

*Extent:* 3 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Muck

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Organic material over glaciolacustrine deposits and/or till

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May)

*Deepest depth to wet zone:* 2.5 feet (February)

*Shallowest ponding:* 0.3 foot (July, August, September)

*Deepest ponding:* 0.5 foot (January, February, March, April, May, June, October, November, December)

*Available water capacity to a depth of 60 inches:* 11.3 inches

*Content of organic matter in the upper 10 inches:* 78.6 percent

*Typical profile:*

Oa—0 to 9 inches; muck

A—9 to 14 inches; loamy fine sand

Bg1,Bg2—14 to 24 inches; loamy fine sand

2BCkg-2Cg—24 to 80 inches; loam

### **Berner**

*Extent:* 2 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Muck

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Organic material over glaciolacustrine deposits and/or till

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May, June)

*Deepest depth to wet zone:* 2.1 feet (February)

*Shallowest ponding:* 0.3 foot (January, February, July, August, September, October, November, December)

*Deepest ponding:* 0.5 foot (March, April, May, June)

*Available water capacity to a depth of 60 inches:* 15.9 inches

*Content of organic matter in the upper 10 inches:* 85 percent

*Typical profile:*

Oa1,Oa2—0 to 28 inches; muck

A—28 to 31 inches; sandy loam

Bg—31 to 44 inches; sand

2CBkg—44 to 80 inches; loam

### **Grygla**

*Extent:* 2 percent of the unit

*Geomorphic component:* Flats and swales on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Loamy fine sand

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits and till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 4.1 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, September, December

*Deepest ponding:* 0.3 foot (April, May)

*Available water capacity to a depth of 60 inches:* 8.4 inches

*Content of organic matter in the upper 10 inches:* 1.8 percent

*Typical profile:*

Ap—0 to 6 inches; loamy fine sand

Bg—6 to 26 inches; fine sand

2Bkg-2Cg—26 to 80 inches; loam

**Seelyeville**

*Extent:* 2 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Muck

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Organic material

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May)

*Deepest depth to wet zone:* 1.6 feet (February, August)

*Shallowest ponding:* 0.3 foot (January, February, July, August, September, October, November, December)

*Deepest ponding:* 0.5 foot (March, April, May, June)

*Available water capacity to a depth of 60 inches:* 25.1 inches

*Content of organic matter in the upper 10 inches:* 90 percent

*Typical profile:*

Oa1—0 to 10 inches; muck

Oa2-Oa5—10 to 80 inches; muck

**Major Uses of the Map Unit**

- Pasture, wildlife habitat

**B203A—Northwood muck, depressional, MLRA 88, 0 to 1 percent slopes****Component Description****Northwood and similar soils**

*Extent:* 75 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Muck

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Organic material over glaciolacustrine deposits and/or till

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May)

*Deepest depth to wet zone:* 2.5 feet (February)

*Shallowest ponding:* 0.3 foot (July, August, September)

*Deepest ponding:* 0.5 foot (January, February, March, April, May, June, October, November, December)

*Available water capacity to a depth of 60 inches:* 11.3 inches

*Content of organic matter in the upper 10 inches:* 78.6 percent

*Typical profile:*

Oa—0 to 9 inches; muck

A—9 to 14 inches; loamy fine sand

Bg1,Bg2—14 to 24 inches; loamy fine sand

2BCkg-2Cg—24 to 80 inches; loam

**Hamre**

*Extent:* 10 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Muck  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Very poorly drained  
*Flooding:* None  
*Shallowest depth to wet zone:* At the surface (March, April, May)  
*Deepest depth to wet zone:* 2.5 feet (February)  
*Shallowest ponding:* 0.3 foot (July, August, September)  
*Deepest ponding:* 0.5 foot (January, February, March, April, May, June, October, November, December)  
*Available water capacity to a depth of 60 inches:* 13.3 inches  
*Content of organic matter in the upper 10 inches:* 85 percent  
*Typical profile:*  
     Oa—0 to 13 inches; muck  
     A—13 to 18 inches; loam  
     Bg—18 to 35 inches; loam  
     BCg-Cg—35 to 80 inches; loam

### **Grygla**

*Extent:* 7 percent of the unit  
*Geomorphic component:* Flats and swales on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Loamy fine sand  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits and till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 4.1 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, September, December  
*Deepest ponding:* 0.3 foot (April, May)  
*Available water capacity to a depth of 60 inches:* 8.4 inches  
*Content of organic matter in the upper 10 inches:* 1.8 percent  
*Typical profile:*  
     Ap—0 to 6 inches; loamy fine sand  
     Bg—6 to 26 inches; fine sand  
     2Bkg-2Cg—26 to 80 inches; loam

### **Berner**

*Extent:* 5 percent of the unit  
*Geomorphic component:* Depressions on lake plains  
*Slope range:* 0 to 1 percent  
*Texture of the surface layer:* Muck  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Very poorly drained  
*Parent material:* Organic material over glaciolacustrine deposits and/or till  
*Flooding:* None  
*Shallowest depth to wet zone:* At the surface (March, April, May, June)  
*Deepest depth to wet zone:* 2.1 feet (February)  
*Shallowest ponding:* 0.3 foot (January, February, July, August, September, October, November, December)  
*Deepest ponding:* 0.5 foot (March, April, May, June)  
*Available water capacity to a depth of 60 inches:* 15.9 inches  
*Content of organic matter in the upper 10 inches:* 85 percent

*Typical profile:*

Oa1,Oa2—0 to 28 inches; muck  
 A—28 to 31 inches; sandy loam  
 Bg—31 to 44 inches; sand  
 2CBkg—44 to 80 inches; loam

**Chilgren**

*Extent:* 3 percent of the unit

*Geomorphic component:* Flats and swales on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 3.8 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, December

*Deepest ponding:* 0.3 foot (April, May, June, September, October, November)

*Available water capacity to a depth of 60 inches:* 9.9 inches

*Content of organic matter in the upper 10 inches:* 1.1 percent

*Typical profile:*

A—0 to 4 inches; fine sandy loam  
 E—4 to 10 inches; fine sandy loam  
 Btg—10 to 18 inches; clay loam  
 Bkg1,Bkg2—18 to 72 inches; loam  
 Cg—72 to 80 inches; loam

**Major Uses of the Map Unit**

- Pasture, wildlife habitat

**B204A—Roliss loam, MLRA 88, 0 to 2 percent slopes****Component Description****Roliss and similar soils**

*Extent:* 75 percent of the unit

*Geomorphic component:* Flats and swales on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 3.8 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, December

*Deepest ponding:* 0.3 foot (April, May, June, September, October, November)

*Available water capacity to a depth of 60 inches:* 10.7 inches

*Content of organic matter in the upper 10 inches:* 5 percent

*Typical profile:*

Ap,A—0 to 14 inches; loam

Bg—14 to 20 inches; loam  
 Cg1-Cg4—20 to 80 inches; loam

### **Grygla**

*Extent:* 8 percent of the unit  
*Geomorphic component:* Swales and flats on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Loamy fine sand  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits and till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 4.1 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, September, December  
*Deepest ponding:* 0.3 foot (April, May)  
*Available water capacity to a depth of 60 inches:* 8.4 inches  
*Content of organic matter in the upper 10 inches:* 1.8 percent  
*Typical profile:*  
 Ap—0 to 6 inches; loamy fine sand  
 Bg—6 to 26 inches; fine sand  
 2Bkg-2Cg—26 to 80 inches; loam

### **Chilgren**

*Extent:* 5 percent of the unit  
*Geomorphic component:* Flats and swales on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 3.8 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, December  
*Deepest ponding:* 0.3 foot (April, May, June, September, October, November)  
*Available water capacity to a depth of 60 inches:* 9.9 inches  
*Content of organic matter in the upper 10 inches:* 1.1 percent  
*Typical profile:*  
 A—0 to 4 inches; fine sandy loam  
 E—4 to 10 inches; fine sandy loam  
 Btg—10 to 18 inches; clay loam  
 Bkg1,Bkg2—18 to 72 inches; loam  
 Cg—72 to 80 inches; loam

### **Garnes**

*Extent:* 5 percent of the unit  
*Geomorphic component:* Rises on lake plains  
*Slope range:* 0 to 3 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Glaciolacustrine deposits and till

*Flooding:* None

*Shallowest depth to wet zone:* 2.5 feet (April)

*Deepest depth to wet zone:* 6.7 feet (transitory) (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 10 inches

*Content of organic matter in the upper 10 inches:* 1.1 percent

*Typical profile:*

Ap—0 to 6 inches; fine sandy loam

E—6 to 9 inches; loamy fine sand

Bt—9 to 14 inches; clay loam

Bk1,Bk2—14 to 72 inches; loam

C—72 to 80 inches; loam

### **Roliss, depressional**

*Extent:* 5 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May)

*Deepest depth to wet zone:* 2.5 feet (February)

*Shallowest ponding:* 0.3 foot (July, August, September, October)

*Deepest ponding:* 0.5 foot (January, February, March, April, May, June, November, December)

*Available water capacity to a depth of 60 inches:* 10.9 inches

*Content of organic matter in the upper 10 inches:* 10 percent

*Typical profile:*

Ap,A—0 to 14 inches; loam

Bg—14 to 20 inches; loam

Cg1-Cg4—20 to 80 inches; loam

### **Hamre**

*Extent:* 2 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Muck

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May)

*Deepest depth to wet zone:* 2.5 feet (February)

*Shallowest ponding:* 0.3 foot (July, August, September)

*Deepest ponding:* 0.5 foot (January, February, March, April, May, June, October, November, December)

*Available water capacity to a depth of 60 inches:* 13.3 inches

*Content of organic matter in the upper 10 inches:* 85 percent

*Typical profile:*

Oa—0 to 13 inches; muck

A—13 to 18 inches; loam

Bg—18 to 35 inches; loam

BCg-Cg—35 to 80 inches; loam

### Major Uses of the Map Unit

- Cropland, pasture, hayland

## B205A—Berner muck, depressional, MLRA 88, 0 to 1 percent slopes

### Component Description

#### Berner and similar soils

*Extent:* 80 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Muck

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Organic material over glaciolacustrine deposits and/or till

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May, June)

*Deepest depth to wet zone:* 2.1 feet (February)

*Shallowest ponding:* 0.3 foot (January, February, July, August, September, October, November, December)

*Deepest ponding:* 0.5 foot (March, April, May, June)

*Available water capacity to a depth of 60 inches:* 15.9 inches

*Content of organic matter in the upper 10 inches:* 85 percent

*Typical profile:*

Oa1,Oa2—0 to 28 inches; muck

A—28 to 31 inches; sandy loam

Bg—31 to 44 inches; sand

2CBkg—44 to 80 inches; loam

#### Northwood

*Extent:* 7 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Muck

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Organic material over glaciolacustrine deposits and/or till

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May)

*Deepest depth to wet zone:* 2.5 feet (February)

*Shallowest ponding:* 0.3 foot (July, August, September)

*Deepest ponding:* 0.5 foot (January, February, March, April, May, June, October, November, December)

*Available water capacity to a depth of 60 inches:* 11.3 inches

*Content of organic matter in the upper 10 inches:* 78.6 percent

*Typical profile:*

Oa—0 to 9 inches; muck

A—9 to 14 inches; loamy fine sand

Bg1,Bg2—14 to 24 inches; fine sand

2BCkg-2Cg—24 to 80 inches; loam

#### Grygla

*Extent:* 5 percent of the unit

*Geomorphic component:* Flats and swales on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Loamy fine sand  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits and till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 4.1 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, September, December  
*Deepest ponding:* 0.3 foot (April, May)  
*Available water capacity to a depth of 60 inches:* 8.4 inches  
*Content of organic matter in the upper 10 inches:* 1.8 percent  
*Typical profile:*  
     Ap—0 to 6 inches; loamy fine sand  
     Bg—6 to 26 inches; fine sand  
     2Bkg-2Cg—26 to 80 inches; loam

### **Cathro**

*Extent:* 3 percent of the unit  
*Geomorphic component:* Depressions on lake plains  
*Slope range:* 0 to 1 percent  
*Texture of the surface layer:* Muck  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Very poorly drained  
*Parent material:* Organic material over till  
*Flooding:* None  
*Shallowest depth to wet zone:* At the surface (March, April, May, June)  
*Deepest depth to wet zone:* 2.1 feet (February)  
*Shallowest ponding:* 0.3 foot (January, February, July, August, September, October, November, December)  
*Deepest ponding:* 0.5 foot (March, April, May, June)  
*Available water capacity to a depth of 60 inches:* 15.9 inches  
*Content of organic matter in the upper 10 inches:* 85 percent  
*Typical profile:*  
     Oa1,Oa2—0 to 11 inches; muck  
     Oa3—11 to 23 inches; muck  
     Cg—23 to 60 inches; loam

### **Hamre**

*Extent:* 3 percent of the unit  
*Geomorphic component:* Depressions on lake plains  
*Slope range:* 0 to 1 percent  
*Texture of the surface layer:* Muck  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Very poorly drained  
*Flooding:* None  
*Shallowest depth to wet zone:* At the surface (March, April, May)  
*Deepest depth to wet zone:* 2.5 feet (February)  
*Shallowest ponding:* 0.3 foot (July, August, September)  
*Deepest ponding:* 0.5 foot (January, February, March, April, May, June, October, November, December)  
*Available water capacity to a depth of 60 inches:* 13.3 inches  
*Content of organic matter in the upper 10 inches:* 85 percent

*Typical profile:*

- Oa—0 to 13 inches; muck
- A—13 to 18 inches; loam
- Bg—18 to 35 inches; loam
- BCg-Cg—35 to 80 inches; loam

**Seelyeville***Extent:* 2 percent of the unit*Geomorphic component:* Depressions on lake plains*Slope range:* 0 to 1 percent*Texture of the surface layer:* Muck*Depth to restrictive feature:* Very deep (more than 60 inches)*Drainage class:* Very poorly drained*Parent material:* Organic material*Flooding:* None*Shallowest depth to wet zone:* At the surface (March, April, May)*Deepest depth to wet zone:* 1.6 feet (February, August)*Shallowest ponding:* 0.3 foot (January, February, July, August, September, October, November, December)*Deepest ponding:* 0.5 foot (March, April, May, June)*Available water capacity to a depth of 60 inches:* 25.1 inches*Content of organic matter in the upper 10 inches:* 90 percent*Typical profile:*

- Oa1—0 to 10 inches; muck
- Oa2-Oa5—10 to 80 inches; muck

**Major Uses of the Map Unit**

- Pasture, wildlife habitat

**B206A—Hamre muck, depressionnal, MLRA 88, 0 to 1 percent slopes****Component Description****Hamre and similar soils***Extent:* 80 percent of the unit*Geomorphic component:* Depressions on lake plains*Slope range:* 0 to 1 percent*Texture of the surface layer:* Muck*Depth to restrictive feature:* Very deep (more than 60 inches)*Drainage class:* Very poorly drained*Flooding:* None*Shallowest depth to wet zone:* At the surface (March, April, May)*Deepest depth to wet zone:* 2.5 feet (February)*Shallowest ponding:* 0.3 foot (July, August, September)*Deepest ponding:* 0.5 foot (January, February, March, April, May, June, October, November, December)*Available water capacity to a depth of 60 inches:* 13.3 inches*Content of organic matter in the upper 10 inches:* 85 percent*Typical profile:*

- Oa—0 to 13 inches; muck
- A—13 to 18 inches; loam
- Bg—18 to 35 inches; loam
- BCg-Cg—35 to 80 inches; loam

**Chilgren**

*Extent:* 8 percent of the unit

*Geomorphic component:* Flats and swales on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 3.8 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, December

*Deepest ponding:* 0.3 foot (April, May, June, September, October, November)

*Available water capacity to a depth of 60 inches:* 9.9 inches

*Content of organic matter in the upper 10 inches:* 1.1 percent

*Typical profile:*

A—0 to 4 inches; fine sandy loam

E—4 to 10 inches; fine sandy loam

Btg—10 to 18 inches; clay loam

Bkg1,Bkg2—18 to 72 inches; loam

Cg—72 to 80 inches; loam

**Northwood**

*Extent:* 5 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Muck

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Organic material over glaciolacustrine deposits and/or till

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May)

*Deepest depth to wet zone:* 2.5 feet (February)

*Shallowest ponding:* 0.3 foot (July, August, September)

*Deepest ponding:* 0.5 foot (January, February, March, April, May, June, October, November, December)

*Available water capacity to a depth of 60 inches:* 11.3 inches

*Content of organic matter in the upper 10 inches:* 78.6 percent

*Typical profile:*

Oa—0 to 9 inches; muck

A—9 to 14 inches; loamy fine sand

Bg1,Bg2—14 to 24 inches; loamy fine sand

2BCkg-2Cg—24 to 80 inches; loam

**Cathro**

*Extent:* 3 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Muck

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Organic material over till

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May, June)

*Deepest depth to wet zone:* 2.1 feet (February)

*Shallowest ponding:* 0.3 foot (January, February, July, August, September, October, November, December)

*Deepest ponding:* 0.5 foot (March, April, May, June)

*Available water capacity to a depth of 60 inches:* 15.9 inches

*Content of organic matter in the upper 10 inches:* 85 percent

*Typical profile:*

Oa1,Oa2—0 to 11 inches; muck

Oa3—11 to 23 inches; muck

Cg—23 to 60 inches; loam

### **Grygla**

*Extent:* 2 percent of the unit

*Geomorphic component:* Swales and flats on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Loamy fine sand

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits and till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 4.1 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, September, December

*Deepest ponding:* 0.3 foot (April, May)

*Available water capacity to a depth of 60 inches:* 8.4 inches

*Content of organic matter in the upper 10 inches:* 1.8 percent

*Typical profile:*

Ap—0 to 6 inches; loamy fine sand

Bg—6 to 26 inches; fine sand

2Bkg-2Cg—26 to 80 inches; loam

### **Roliss**

*Extent:* 2 percent of the unit

*Geomorphic component:* Flats and swales on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 3.8 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, December

*Deepest ponding:* 0.3 foot (April, May, June, September, October, November)

*Available water capacity to a depth of 60 inches:* 10.7 inches

*Content of organic matter in the upper 10 inches:* 5 percent

*Typical profile:*

Ap,A—0 to 14 inches; loam

Bg—14 to 20 inches; loam

Cg1-Cg4—20 to 80 inches; loam

### **Major Uses of the Map Unit**

- Pasture, wildlife habitat

## **I1A—Augsburg loam, 0 to 2 percent slopes**

### **Component Description**

#### **Augsburg and similar soils**

*Extent:* 75 percent of the unit

*Geomorphic component:* Swales and flats on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 3.8 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, December

*Deepest ponding:* 0.3 foot (April, May, June, September, October, November)

*Available water capacity to a depth of 60 inches:* 10 inches

*Content of organic matter in the upper 10 inches:* 5 percent

*Typical profile:*

Ap,A—0 to 11 inches; loam

Bkg—11 to 18 inches; very fine sandy loam

Bg1—18 to 33 inches; loamy very fine sand

2Bg2—33 to 60 inches; clay

#### **Borup**

*Extent:* 10 percent of the unit

*Geomorphic component:* Swales and flats on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 3.8 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, December

*Deepest ponding:* 0.3 foot (April, May, June)

*Available water capacity to a depth of 60 inches:* 10.7 inches

*Content of organic matter in the upper 10 inches:* 5 percent

*Typical profile:*

Ap,A—0 to 12 inches; loam

Bkg,Bkyg—12 to 34 inches; silt loam

Cg—34 to 60 inches; very fine sandy loam

#### **Foxlake**

*Extent:* 5 percent of the unit

*Geomorphic component:* Flats and swales on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (April)

*Deepest depth to wet zone:* 3 feet (August)

*Months when ponding does not occur:* January, February, March, December

*Deepest ponding:* 0.3 foot (April, May, June, November)

*Available water capacity to a depth of 60 inches:* 8.9 inches

*Content of organic matter in the upper 10 inches:* 5 percent

*Typical profile:*

Ap,A—0 to 19 inches; loam

Bg—19 to 38 inches; silty clay

Bkg—38 to 49 inches; clay

Cg—49 to 80 inches; clay

### **Augsburg, depressional**

*Extent:* 3 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Mucky loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May)

*Deepest depth to wet zone:* 3 feet (February)

*Shallowest ponding:* 0.3 foot (July, August, September, October)

*Deepest ponding:* 0.5 foot (January, February, March, April, May, June, November, December)

*Available water capacity to a depth of 60 inches:* 10.3 inches

*Content of organic matter in the upper 10 inches:* 10 percent

*Typical profile:*

Ap,A—0 to 11 inches; mucky loam

Bkg—11 to 18 inches; very fine sandy loam

Bg1—18 to 33 inches; very fine sandy loam

2Bg2—33 to 60 inches; clay

### **Wheatville**

*Extent:* 3 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Very fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Somewhat poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 1.3 feet (April)

*Deepest depth to wet zone:* 6.7 feet (transitory) (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 9.4 inches

*Content of organic matter in the upper 10 inches:* 2.8 percent

*Typical profile:*

Ap—0 to 9 inches; very fine sandy loam

Bk1,Bk2—9 to 31 inches; very fine sandy loam

2C1-2C4—31 to 80 inches; clay

### **Glyndon**

*Extent:* 2 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Very fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Somewhat poorly drained  
*Parent material:* Glaciolacustrine deposits  
*Flooding:* None  
*Shallowest depth to wet zone:* 1 foot (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 10.4 inches  
*Content of organic matter in the upper 10 inches:* 3 percent  
*Typical profile:*  
     Ap,Ak—0 to 11 inches; very fine sandy loam  
     Bk1,Bk2—11 to 28 inches; loam  
     C,Cg—28 to 60 inches; loamy very fine sand

### **Espelle**

*Extent:* 1 percent of the unit  
*Geomorphic component:* Flats and swales on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 3.8 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, December  
*Deepest ponding:* 0.3 foot (April, May, June)  
*Available water capacity to a depth of 60 inches:* 7.1 inches  
*Content of organic matter in the upper 10 inches:* 5.6 percent  
*Typical profile:*  
     Ap—0 to 9 inches; fine sandy loam  
     Bw1,Bw2—9 to 24 inches; fine sand  
     2Bg-2Cg—24 to 80 inches; clay

### **Hattie**

*Extent:* 1 percent of the unit  
*Geomorphic component:* Escarpments on lake plains  
*Position on the landform:* Summits  
*Slope range:* 1 to 3 percent  
*Texture of the surface layer:* Clay  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Till  
*Flooding:* None  
*Shallowest depth to wet zone:* 2.1 feet (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (February)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 7.7 inches  
*Content of organic matter in the upper 10 inches:* 2.5 percent  
*Typical profile:*  
     Ap—0 to 8 inches; clay

Bk—8 to 22 inches; silty clay

C—22 to 80 inches; clay

### Major Uses of the Map Unit

- Cropland

## I2A—Augsburg very fine sandy loam, 0 to 2 percent slopes

### Component Description

#### Augsburg and similar soils

*Extent:* 75 percent of the unit

*Geomorphic component:* Swales and flats on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Very fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 3.8 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, December

*Deepest ponding:* 0.3 foot (April, May, June, September, October, November)

*Available water capacity to a depth of 60 inches:* 10 inches

*Content of organic matter in the upper 10 inches:* 5 percent

*Typical profile:*

Ap,Ak—0 to 11 inches; very fine sandy loam

Bkg—11 to 18 inches; very fine sandy loam

Bg1—18 to 33 inches; loamy very fine sand

2Bg2—33 to 60 inches; clay

#### Borup

*Extent:* 10 percent of the unit

*Geomorphic component:* Swales and flats on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Very fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 3.8 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, December

*Deepest ponding:* 0.3 foot (April, May, June)

*Available water capacity to a depth of 60 inches:* 10.7 inches

*Content of organic matter in the upper 10 inches:* 5 percent

*Typical profile:*

Ap,A—0 to 12 inches; very fine sandy loam

Bkg,Bkyg—12 to 34 inches; silt loam

Cg—34 to 60 inches; very fine sandy loam

**Foxlake**

*Extent:* 5 percent of the unit

*Geomorphic component:* Flats and swales on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (April)

*Deepest depth to wet zone:* 3 feet (August)

*Months when ponding does not occur:* January, February, March, December

*Deepest ponding:* 0.3 foot (April, May, June, November)

*Available water capacity to a depth of 60 inches:* 8.9 inches

*Content of organic matter in the upper 10 inches:* 5 percent

*Typical profile:*

Ap,A—0 to 19 inches; loam

Bg—19 to 38 inches; silty clay

Bkg—38 to 49 inches; clay

Cg—49 to 80 inches; clay

**Augsburg, depressional**

*Extent:* 3 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Mucky loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May)

*Deepest depth to wet zone:* 3 feet (February)

*Shallowest ponding:* 0.3 foot (July, August, September, October)

*Deepest ponding:* 0.5 foot (January, February, March, April, May, June, November, December)

*Available water capacity to a depth of 60 inches:* 10.3 inches

*Content of organic matter in the upper 10 inches:* 10 percent

*Typical profile:*

Ap,A—0 to 11 inches; mucky loam

Bkg—11 to 18 inches; very fine sandy loam

Bg1—18 to 33 inches; very fine sandy loam

2Bg2—33 to 60 inches; clay

**Wheatville**

*Extent:* 3 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Very fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Somewhat poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 1.3 feet (April)

*Deepest depth to wet zone:* 6.7 feet (transitory) (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 9.4 inches  
*Content of organic matter in the upper 10 inches:* 2.8 percent  
*Typical profile:*

Ap—0 to 9 inches; very fine sandy loam  
 Bk1,Bk2—9 to 31 inches; very fine sandy loam  
 2C1-2C4—31 to 80 inches; clay

### **Glyndon**

*Extent:* 2 percent of the unit  
*Geomorphic component:* Rises on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Very fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Somewhat poorly drained  
*Parent material:* Glaciolacustrine deposits  
*Flooding:* None  
*Shallowest depth to wet zone:* 1 foot (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 10.4 inches  
*Content of organic matter in the upper 10 inches:* 3 percent  
*Typical profile:*

Ap,Ak—0 to 11 inches; very fine sandy loam  
 Bk1,Bk2—11 to 28 inches; loam  
 C,Cg—28 to 60 inches; loamy very fine sand

### **Espelie**

*Extent:* 1 percent of the unit  
*Geomorphic component:* Flats and swales on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 3.8 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, December  
*Deepest ponding:* 0.3 foot (April, May, June)  
*Available water capacity to a depth of 60 inches:* 7.1 inches  
*Content of organic matter in the upper 10 inches:* 5.6 percent  
*Typical profile:*

Ap—0 to 9 inches; fine sandy loam  
 Bw1,Bw2—9 to 24 inches; fine sand  
 2Bg-2Cg—24 to 80 inches; clay

### **Hattie**

*Extent:* 1 percent of the unit  
*Geomorphic component:* Escarpments on lake plains  
*Position on the landform:* Summits  
*Slope range:* 1 to 3 percent  
*Texture of the surface layer:* Clay  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* 2.1 feet (April)

*Deepest depth to wet zone:* 6.7 feet (transitory) (February)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 7.7 inches

*Content of organic matter in the upper 10 inches:* 2.5 percent

*Typical profile:*

Ap—0 to 8 inches; clay

Bk—8 to 22 inches; silty clay

C—22 to 80 inches; clay

### Major Uses of the Map Unit

- Cropland

## 13A—Berner muck, 0 to 1 percent slopes

### Component Description

#### Berner and similar soils

*Extent:* 80 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Muck

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Organic material over glaciolacustrine deposits and/or till

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May, June)

*Deepest depth to wet zone:* 2.1 feet (February)

*Shallowest ponding:* 0.3 foot (January, February, July, August, September, October, November, December)

*Deepest ponding:* 0.5 foot (March, April, May, June)

*Available water capacity to a depth of 60 inches:* 15.9 inches

*Content of organic matter in the upper 10 inches:* 85 percent

*Typical profile:*

Oa1,Oa2—0 to 28 inches; muck

A—28 to 31 inches; sandy loam

Bg—31 to 44 inches; sand

2CBkg—44 to 80 inches; loam

#### Northwood

*Extent:* 7 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Muck

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Organic material over glaciolacustrine deposits and/or till

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May)

*Deepest depth to wet zone:* 2.5 feet (February)

*Shallowest ponding:* 0.3 foot (July, August, September)

*Deepest ponding:* 0.5 foot (January, February, March, April, May, June, October, November, December)

*Available water capacity to a depth of 60 inches:* 11.3 inches

*Content of organic matter in the upper 10 inches:* 78.6 percent

*Typical profile:*

- Oa—0 to 9 inches; muck
- A—9 to 14 inches; loamy fine sand
- Bg1,Bg2—14 to 24 inches; fine sand
- 2BCkg-2Cg—24 to 80 inches; loam

### **Kratka**

*Extent:* 5 percent of the unit

*Geomorphic component:* Flats and swales on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 4.1 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, September, December

*Deepest ponding:* 0.3 foot (April, May)

*Available water capacity to a depth of 60 inches:* 9.1 inches

*Content of organic matter in the upper 10 inches:* 6 percent

*Typical profile:*

- Ap,A—0 to 11 inches; fine sandy loam
- Bg1,Bg2—11 to 18 inches; loamy fine sand
- Cg1—18 to 25 inches; fine sand
- 2Cg2-2Cg4—25 to 80 inches; loam

### **Hamre**

*Extent:* 3 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Muck

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May)

*Deepest depth to wet zone:* 2.5 feet (February)

*Shallowest ponding:* 0.3 foot (July, August, September)

*Deepest ponding:* 0.5 foot (January, February, March, April, May, June, October, November, December)

*Available water capacity to a depth of 60 inches:* 13.3 inches

*Content of organic matter in the upper 10 inches:* 85 percent

*Typical profile:*

- Oa—0 to 13 inches; muck
- A—13 to 18 inches; loam
- Bg1,Bg2—18 to 71 inches; loam
- Cg—71 to 80 inches; loam

### **Strathcona**

*Extent:* 3 percent of the unit

*Geomorphic component:* Flats and swales on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 4.1 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, September, December  
*Deepest ponding:* 0.3 foot (April, May)  
*Available water capacity to a depth of 60 inches:* 9 inches  
*Content of organic matter in the upper 10 inches:* 6 percent  
*Typical profile:*  
     Ap—0 to 10 inches; fine sandy loam  
     Bkg—10 to 17 inches; fine sandy loam  
     Cg1—17 to 28 inches; fine sand  
     2Cg2,2Cg3—28 to 80 inches; loam

### **Seelyeville**

*Extent:* 2 percent of the unit  
*Geomorphic component:* Depressions on lake plains  
*Slope range:* 0 to 1 percent  
*Texture of the surface layer:* Muck  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Very poorly drained  
*Parent material:* Organic material  
*Flooding:* None  
*Shallowest depth to wet zone:* At the surface (March, April, May)  
*Deepest depth to wet zone:* 1.6 feet (February, August)  
*Shallowest ponding:* 0.3 foot (January, February, July, August, September, October, November, December)  
*Deepest ponding:* 0.5 foot (March, April, May, June)  
*Available water capacity to a depth of 60 inches:* 25.1 inches  
*Content of organic matter in the upper 10 inches:* 90 percent  
*Typical profile:*  
     Oa1—0 to 10 inches; muck  
     Oa2-Oa5—10 to 80 inches; muck

### **Major Uses of the Map Unit**

- Pasture, hayland, wildlife habitat

## **I4A—Berner, Rosewood, and Strathcona soils, seepy, 0 to 2 percent slopes**

### **Component Description**

#### **Berner and similar soils**

*Extent:* 0 to 90 percent of the unit  
*Geomorphic component:* Depressions on lake plains  
*Slope range:* 0 to 1 percent  
*Texture of the surface layer:* Muck  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Very poorly drained  
*Parent material:* Organic material over glaciolacustrine deposits and/or till  
*Flooding:* None  
*Shallowest depth to wet zone:* At the surface (March, April, May, June)

*Deepest depth to wet zone:* 2.1 feet (February)

*Shallowest ponding:* 0.3 foot (January, February, July, August, September, October, November, December)

*Deepest ponding:* 0.5 foot (March, April, May, June)

*Available water capacity to a depth of 60 inches:* 15.9 inches

*Content of organic matter in the upper 10 inches:* 85 percent

*Typical profile:*

Oa1,Oa2—0 to 28 inches; muck

A—28 to 31 inches; sandy loam

Bg—31 to 44 inches; sand

2CBkg—44 to 80 inches; loam

### **Rosewood, depressional, and similar soils**

*Extent:* 0 to 90 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Glaciolacustrine deposits

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (April)

*Deepest depth to wet zone:* 3 feet (February, August)

*Shallowest ponding:* 0.3 foot (July, August, September, October)

*Deepest ponding:* 0.5 foot (January, February, March, April, May, June, November, December)

*Available water capacity to a depth of 60 inches:* 6.2 inches

*Content of organic matter in the upper 10 inches:* 8.2 percent

*Typical profile:*

Ap—0 to 8 inches; fine sandy loam

Bkg1,Bkg2—8 to 18 inches; fine sandy loam

Cg1-Cg3—18 to 80 inches; fine sand

### **Strathcona, depressional, and similar soils**

*Extent:* 0 to 90 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Mucky fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May)

*Deepest depth to wet zone:* 2.5 feet (February, August)

*Shallowest ponding:* 0.3 foot (July, August, September, October)

*Deepest ponding:* 0.5 foot (January, February, March, April, May, June, November, December)

*Available water capacity to a depth of 60 inches:* 9.9 inches

*Content of organic matter in the upper 10 inches:* 10 percent

*Typical profile:*

Ap—0 to 10 inches; mucky fine sandy loam

Bkg—10 to 17 inches; fine sandy loam

Cg1—17 to 28 inches; fine sand

2Cg2,2Cg3—28 to 80 inches; loam

**Rosewood**

*Extent:* 0 to 10 percent of the unit

*Geomorphic component:* Swales and flats on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 4.9 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, September, November, December

*Deepest ponding:* 0.3 foot (April, May, June, October)

*Available water capacity to a depth of 60 inches:* 5.6 inches

*Content of organic matter in the upper 10 inches:* 5 percent

*Typical profile:*

Ap—0 to 8 inches; fine sandy loam

Bkg1,Bkg2—8 to 18 inches; fine sandy loam

Cg1-Cg3—18 to 80 inches; fine sand

**Deerwood**

*Extent:* 0 to 10 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Muck

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Organic material over glaciolacustrine deposits

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May)

*Deepest depth to wet zone:* 2.5 feet (February)

*Shallowest ponding:* 0.3 foot (July, August, September)

*Deepest ponding:* 0.5 foot (January, February, March, April, May, June, October, November, December)

*Available water capacity to a depth of 60 inches:* 7.1 inches

*Content of organic matter in the upper 10 inches:* 75 percent

*Typical profile:*

Oa—0 to 10 inches; muck

A—10 to 12 inches; loamy sand

Cg1,Cg2—12 to 60 inches; sand

**Mavie**

*Extent:* 0 to 10 percent of the unit

*Geomorphic component:* Flats and swales on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 4.1 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, September, November, December

*Deepest ponding:* 0.3 foot (April, May, June, October)  
*Available water capacity to a depth of 60 inches:* 7.4 inches  
*Content of organic matter in the upper 10 inches:* 6 percent  
*Typical profile:*

Ap—0 to 12 inches; fine sandy loam  
 Bk—12 to 18 inches; sandy loam  
 2C1,2C2—18 to 39 inches; very gravelly coarse sand  
 3C3—39 to 80 inches; loam

### **Strathcona**

*Extent:* 0 to 10 percent of the unit  
*Geomorphic component:* Flats and swales on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 4.1 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, September, December  
*Deepest ponding:* 0.3 foot (April, May)  
*Available water capacity to a depth of 60 inches:* 9 inches  
*Content of organic matter in the upper 10 inches:* 6 percent  
*Typical profile:*

Ap—0 to 10 inches; fine sandy loam  
 Bkg—10 to 17 inches; fine sandy loam  
 Cg1—17 to 28 inches; fine sand  
 2Cg2,2Cg3—28 to 80 inches; loam

### **Major Uses of the Map Unit**

- Pasture, hayland, wildlife habitat

## **I5A—Borup loam, 0 to 2 percent slopes**

### **Component Description**

#### **Borup and similar soils**

*Extent:* 75 percent of the unit  
*Geomorphic component:* Flats and swales on lake plains  
*Slope range:* 0 to 1 percent  
*Texture of the surface layer:* Loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 3.8 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, December  
*Deepest ponding:* 0.3 foot (April, May, June)  
*Available water capacity to a depth of 60 inches:* 10.7 inches  
*Content of organic matter in the upper 10 inches:* 5 percent

*Typical profile:*

- Ap,A—0 to 12 inches; loam
- Bkg,Bkyg—12 to 34 inches; silt loam
- Cg—34 to 60 inches; very fine sandy loam

**Glyndon**

- Extent:* 9 percent of the unit
- Geomorphic component:* Rises on lake plains
- Slope range:* 0 to 2 percent
- Texture of the surface layer:* Very fine sandy loam
- Depth to restrictive feature:* Very deep (more than 60 inches)
- Drainage class:* Somewhat poorly drained
- Parent material:* Glaciolacustrine deposits
- Flooding:* None
- Shallowest depth to wet zone:* 1 foot (April)
- Deepest depth to wet zone:* 6.7 feet (transitory) (August)
- Ponding:* None
- Available water capacity to a depth of 60 inches:* 10.4 inches
- Content of organic matter in the upper 10 inches:* 3 percent
- Typical profile:*
  - Ap,Ak—0 to 11 inches; very fine sandy loam
  - Bk1,Bk2—11 to 28 inches; loam
  - C,Cg—28 to 60 inches; loamy very fine sand

**Rosewood**

- Extent:* 8 percent of the unit
- Geomorphic component:* Swales and flats on lake plains
- Slope range:* 0 to 2 percent
- Texture of the surface layer:* Fine sandy loam
- Depth to restrictive feature:* Very deep (more than 60 inches)
- Drainage class:* Poorly drained
- Parent material:* Glaciolacustrine deposits
- Flooding:* None
- Shallowest depth to wet zone:* 0.5 foot (April)
- Deepest depth to wet zone:* 4.9 feet (August)
- Months when ponding does not occur:* January, February, March, July, August, September, November, December
- Deepest ponding:* 0.3 foot (April, May, June, October)
- Available water capacity to a depth of 60 inches:* 5.6 inches
- Content of organic matter in the upper 10 inches:* 5 percent
- Typical profile:*
  - Ap—0 to 8 inches; fine sandy loam
  - Bkg1,Bkg2—8 to 18 inches; fine sandy loam
  - Cg1-Cg3—18 to 80 inches; fine sand

**Augsburg**

- Extent:* 5 percent of the unit
- Geomorphic component:* Flats and swales on lake plains
- Slope range:* 0 to 2 percent
- Texture of the surface layer:* Loam
- Depth to restrictive feature:* Very deep (more than 60 inches)
- Drainage class:* Poorly drained
- Parent material:* Glaciolacustrine deposits over till
- Flooding:* None
- Shallowest depth to wet zone:* 0.5 foot (April)
- Deepest depth to wet zone:* 3.8 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, December

*Deepest ponding:* 0.3 foot (April, May, June, September, October, November)

*Available water capacity to a depth of 60 inches:* 10 inches

*Content of organic matter in the upper 10 inches:* 5 percent

*Typical profile:*

Ap,A—0 to 11 inches; loam

Bkg—11 to 18 inches; very fine sandy loam

Bg1—18 to 33 inches; loamy very fine sand

2Bg2—33 to 60 inches; clay

### **Augsburg, depressional**

*Extent:* 3 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Mucky loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May)

*Deepest depth to wet zone:* 3 feet (February)

*Shallowest ponding:* 0.3 foot (July, August, September, October)

*Deepest ponding:* 0.5 foot (January, February, March, April, May, June, November, December)

*Available water capacity to a depth of 60 inches:* 10.3 inches

*Content of organic matter in the upper 10 inches:* 10 percent

*Typical profile:*

Ap,A—0 to 11 inches; mucky loam

Bkg—11 to 18 inches; very fine sandy loam

Bg1—18 to 33 inches; very fine sandy loam

2Bg2—33 to 60 inches; clay

### **Major Uses of the Map Unit**

- Cropland

## **16A—Borup very fine sandy loam, 0 to 2 percent slopes**

### **Component Description**

#### **Borup and similar soils**

*Extent:* 75 percent of the unit

*Geomorphic component:* Swales and flats on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Very fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 3.8 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, December

*Deepest ponding:* 0.3 foot (April, May, June)

*Available water capacity to a depth of 60 inches:* 10.7 inches

*Content of organic matter in the upper 10 inches:* 5 percent

*Typical profile:*

Ap,A—0 to 12 inches; very fine sandy loam

Bkg,Bkyg—12 to 34 inches; silt loam

Cg—34 to 60 inches; very fine sandy loam

### **Glyndon**

*Extent:* 9 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Very fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Somewhat poorly drained

*Parent material:* Glaciolacustrine deposits

*Flooding:* None

*Shallowest depth to wet zone:* 1 foot (April)

*Deepest depth to wet zone:* 6.7 feet (transitory) (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 10.4 inches

*Content of organic matter in the upper 10 inches:* 3 percent

*Typical profile:*

Ap,Ak—0 to 11 inches; very fine sandy loam

Bk1,Bk2—11 to 28 inches; loam

C,Cg—28 to 60 inches; loamy very fine sand

### **Rosewood**

*Extent:* 8 percent of the unit

*Geomorphic component:* Flats and swales on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 4.9 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, September, November, December

*Deepest ponding:* 0.3 foot (April, May, June, October)

*Available water capacity to a depth of 60 inches:* 5.6 inches

*Content of organic matter in the upper 10 inches:* 5 percent

*Typical profile:*

Ap—0 to 8 inches; fine sandy loam

Bkg1,Bkg2—8 to 18 inches; fine sandy loam

Cg1-Cg3—18 to 80 inches; fine sand

### **Augsburg**

*Extent:* 5 percent of the unit

*Geomorphic component:* Swales and flats on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 3.8 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, December

*Deepest ponding:* 0.3 foot (April, May, June, September, October, November)

*Available water capacity to a depth of 60 inches:* 10 inches

*Content of organic matter in the upper 10 inches:* 5 percent

*Typical profile:*

Ap,A—0 to 11 inches; loam

Bkg—11 to 18 inches; very fine sandy loam

Bg1—18 to 33 inches; loamy very fine sand

2Bg2—33 to 60 inches; clay

### **Augsburg, depressional**

*Extent:* 3 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Mucky loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May)

*Deepest depth to wet zone:* 3 feet (February)

*Shallowest ponding:* 0.3 foot (July, August, September, October)

*Deepest ponding:* 0.5 foot (January, February, March, April, May, June, November, December)

*Available water capacity to a depth of 60 inches:* 10.3 inches

*Content of organic matter in the upper 10 inches:* 10 percent

*Typical profile:*

Ap,A—0 to 11 inches; mucky loam

Bkg—11 to 18 inches; very fine sandy loam

Bg1—18 to 33 inches; very fine sandy loam

2Bg2—33 to 60 inches; clay

### **Major Uses of the Map Unit**

- Cropland

## **17A—Bowstring-Fluvaquents complex, 0 to 2 percent slopes, frequently flooded**

### **Component Description**

#### **Bowstring and similar soils**

*Extent:* 45 percent of the unit

*Geomorphic component:* Swales on flood plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Muck

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Organic material over alluvium

*Months in which flooding does not occur:* January, February, December

*Highest frequency of flooding:* Very frequent (April, May)

*Shallowest depth to wet zone:* At the surface (March, April, May, June)

*Deepest depth to wet zone:* 2.1 feet (February)

*Shallowest ponding:* 0.3 foot (January, February, July, August, September, October, November, December)

*Deepest ponding:* 0.5 foot (March, April, May, June)

*Available water capacity to a depth of 60 inches:* 21.4 inches

*Content of organic matter in the upper 10 inches:* 65 percent

*Typical profile:*

Oa1,Oa2—0 to 38 inches; muck

Cg—38 to 47 inches; stratified sand to fine sandy loam

O'a—47 to 80 inches; muck

### **Fluvaquents and similar soils**

*Extent:* 45 percent of the unit

*Geomorphic component:* Swales and flats on flood plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Alluvium

*Months in which flooding does not occur:* January, February, December

*Highest frequency of flooding:* Very frequent (April, May)

*Shallowest depth to wet zone:* At the surface (March, April, May)

*Deepest depth to wet zone:* 1.6 feet (February, August)

*Shallowest ponding:* 0.5 foot (January, February, March, June, July, August, September, October, November, December)

*Deepest ponding:* 0.7 foot (April, May)

*Available water capacity to a depth of 60 inches:* 8.1 inches

*Content of organic matter in the upper 10 inches:* 5 percent

*Typical profile:*

A—0 to 16 inches; fine sandy loam

Cg—16 to 80 inches; stratified loamy sand to silt loam

### **Hapludolls**

*Extent:* 5 percent of the unit

*Geomorphic component:* Escarpments in drainageways; hillslopes in drainageways

*Slope range:* 2 to 30 percent

*Texture of the surface layer:* Loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Well drained

*Parent material:* Glaciolacustrine deposits and/or till

*Months in which flooding does not occur:* January, February, December

*Highest frequency of flooding:* Rare (March, April, May, June, September, October, November)

*Shallowest depth to wet zone:* 6.7 feet (transitory) (March, April, May, November)

*Deepest depth to wet zone:* More than 6.7 feet (January, February, June, July, August, September, October, December)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 10.4 inches

*Content of organic matter in the upper 10 inches:* 1.9 percent

*Typical profile:*

A—0 to 9 inches; loam

C—9 to 60 inches; loam

### **Water**

*Extent:* 5 percent of the unit

## Major Uses of the Map Unit

- Wetland wildlife habitat

## 18A—Cathro muck, 0 to 1 percent slopes

### Component Description

#### Cathro and similar soils

*Extent:* 80 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Muck

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Organic material over till

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May, June)

*Deepest depth to wet zone:* 2.1 feet (February)

*Shallowest ponding:* 0.3 foot (January, February, July, August, September, October, November, December)

*Deepest ponding:* 0.5 foot (March, April, May, June)

*Available water capacity to a depth of 60 inches:* 15.9 inches

*Content of organic matter in the upper 10 inches:* 85 percent

*Typical profile:*

Oa1,Oa2—0 to 11 inches; muck

Oa3—11 to 23 inches; muck

Cg—23 to 60 inches; loam

#### Hamre

*Extent:* 8 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Muck

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May)

*Deepest depth to wet zone:* 2.5 feet (February)

*Shallowest ponding:* 0.3 foot (July, August, September)

*Deepest ponding:* 0.5 foot (January, February, March, April, May, June, October, November, December)

*Available water capacity to a depth of 60 inches:* 13.3 inches

*Content of organic matter in the upper 10 inches:* 85 percent

*Typical profile:*

Oa—0 to 13 inches; muck

A—13 to 18 inches; loam

Bg1,Bg2—18 to 71 inches; loam

Cg—71 to 80 inches; loam

#### Northwood

*Extent:* 3 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Muck  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Very poorly drained  
*Parent material:* Organic material over glaciolacustrine deposits and/or till  
*Flooding:* None  
*Shallowest depth to wet zone:* At the surface (March, April, May)  
*Deepest depth to wet zone:* 2.5 feet (February)  
*Shallowest ponding:* 0.3 foot (July, August, September)  
*Deepest ponding:* 0.5 foot (January, February, March, April, May, June, October, November, December)  
*Available water capacity to a depth of 60 inches:* 11.3 inches  
*Content of organic matter in the upper 10 inches:* 78.6 percent  
*Typical profile:*  
     Oa—0 to 9 inches; muck  
     A—9 to 14 inches; loamy fine sand  
     Bg1,Bg2—14 to 24 inches; fine sand  
     2BCkg-2Cg—24 to 80 inches; loam

### **Roliss**

*Extent:* 3 percent of the unit  
*Geomorphic component:* Flats and swales on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 3.8 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, December  
*Deepest ponding:* 0.3 foot (April, May, June, September, October, November)  
*Available water capacity to a depth of 60 inches:* 10.7 inches  
*Content of organic matter in the upper 10 inches:* 5 percent  
*Typical profile:*  
     Ap,A—0 to 14 inches; loam  
     Bg—14 to 20 inches; loam  
     Cg1-Cg4—20 to 80 inches; loam

### **Berner**

*Extent:* 2 percent of the unit  
*Geomorphic component:* Depressions on lake plains  
*Slope range:* 0 to 1 percent  
*Texture of the surface layer:* Muck  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Very poorly drained  
*Parent material:* Organic material over glaciolacustrine deposits and/or till  
*Flooding:* None  
*Shallowest depth to wet zone:* At the surface (March, April, May, June)  
*Deepest depth to wet zone:* 2.1 feet (February)  
*Shallowest ponding:* 0.3 foot (January, February, July, August, September, October, November, December)  
*Deepest ponding:* 0.5 foot (March, April, May, June)

*Available water capacity to a depth of 60 inches:* 15.9 inches

*Content of organic matter in the upper 10 inches:* 85 percent

*Typical profile:*

Oa1,Oa2—0 to 28 inches; muck

A—28 to 31 inches; sandy loam

Bg—31 to 44 inches; sand

2CBkg—44 to 80 inches; loam

### **Kratka**

*Extent:* 2 percent of the unit

*Geomorphic component:* Flats and swales on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 4.1 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, September, December

*Deepest ponding:* 0.3 foot (April, May)

*Available water capacity to a depth of 60 inches:* 9.1 inches

*Content of organic matter in the upper 10 inches:* 6 percent

*Typical profile:*

Ap,A—0 to 11 inches; fine sandy loam

Bg1,Bg2—11 to 18 inches; loamy fine sand

Cg1—18 to 25 inches; fine sand

2Cg2-2Cg4—25 to 80 inches; loam

### **Seelyeville**

*Extent:* 2 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Muck

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Organic material

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May)

*Deepest depth to wet zone:* 1.6 feet (February, August)

*Shallowest ponding:* 0.3 foot (January, February, July, August, September, October, November, December)

*Deepest ponding:* 0.5 foot (March, April, May, June)

*Available water capacity to a depth of 60 inches:* 25.1 inches

*Content of organic matter in the upper 10 inches:* 90 percent

*Typical profile:*

Oa1—0 to 10 inches; muck

Oa2-Oa5—10 to 80 inches; muck

### **Major Uses of the Map Unit**

- Pasture, hayland, wildlife habitat

## 19A—Clearwater clay, 0 to 2 percent slopes

### Component Description

#### Clearwater and similar soils

*Extent:* 80 percent of the unit

*Geomorphic component:* Flats and swales on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Clay

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (April)

*Deepest depth to wet zone:* 3 feet (August)

*Months when ponding does not occur:* January, February, March, December

*Deepest ponding:* 0.3 foot (April, May, June, November)

*Available water capacity to a depth of 60 inches:* 8.2 inches

*Content of organic matter in the upper 10 inches:* 4.2 percent

*Typical profile:*

Ap—0 to 8 inches; clay

Bss1,Bss2—8 to 35 inches; clay

Cg1,Cg2—35 to 80 inches; clay

#### Clearwater, very cobbly

*Extent:* 5 percent of the unit

*Geomorphic component:* Swales and flats on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Clay

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (April)

*Deepest depth to wet zone:* 3 feet (August)

*Months when ponding does not occur:* January, February, March, December

*Deepest ponding:* 0.3 foot (April, May, June, November)

*Available water capacity to a depth of 60 inches:* 8.2 inches

*Content of organic matter in the upper 10 inches:* 4.2 percent

*Typical profile:*

Ap—0 to 8 inches; clay

Bss1,Bss2—8 to 35 inches; clay

Cg1,Cg2—35 to 80 inches; clay

#### Reis

*Extent:* 5 percent of the unit

*Geomorphic component:* Rises and flats on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Clay

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 3.6 feet (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 8.3 inches  
*Content of organic matter in the upper 10 inches:* 4.7 percent  
*Typical profile:*

Ap—0 to 9 inches; clay  
 A/Bk—9 to 17 inches; clay  
 Bkss1,Bkss2—17 to 33 inches; clay  
 Bkg—33 to 42 inches; clay  
 Cg1,Cg2—42 to 60 inches; clay  
 C—60 to 80 inches; clay

#### **Clearwater, depressional**

*Extent:* 3 percent of the unit  
*Geomorphic component:* Depressions on lake plains  
*Slope range:* 0 to 1 percent  
*Texture of the surface layer:* Mucky clay loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Very poorly drained  
*Parent material:* Till  
*Flooding:* None  
*Shallowest depth to wet zone:* At the surface (March, April, May)  
*Deepest depth to wet zone:* 1.6 feet (February, August)  
*Ponding depth:* 0.5 foot (all year)  
*Available water capacity to a depth of 60 inches:* 9 inches  
*Content of organic matter in the upper 10 inches:* 8.4 percent  
*Typical profile:*

Ap—0 to 8 inches; mucky clay loam  
 Bss1,Bss2—8 to 35 inches; clay  
 Cg1,Cg2—35 to 80 inches; clay

#### **Espelie**

*Extent:* 3 percent of the unit  
*Geomorphic component:* Swales and flats on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 3.8 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, December  
*Deepest ponding:* 0.3 foot (April, May, June)  
*Available water capacity to a depth of 60 inches:* 7.1 inches  
*Content of organic matter in the upper 10 inches:* 5.6 percent  
*Typical profile:*

Ap—0 to 9 inches; fine sandy loam  
 Bw1,Bw2—9 to 24 inches; fine sand  
 2Bg-2Cg—24 to 80 inches; clay

#### **Foxlake**

*Extent:* 2 percent of the unit  
*Geomorphic component:* Flats and swales on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (April)

*Deepest depth to wet zone:* 3 feet (August)

*Months when ponding does not occur:* January, February, March, December

*Deepest ponding:* 0.3 foot (April, May, June, November)

*Available water capacity to a depth of 60 inches:* 8.9 inches

*Content of organic matter in the upper 10 inches:* 5 percent

*Typical profile:*

Ap,A—0 to 19 inches; loam

Bg—19 to 38 inches; silty clay

Bkg—38 to 49 inches; clay

Cg—49 to 80 inches; clay

### **Hattie**

*Extent:* 1 percent of the unit

*Geomorphic component:* Escarpments on lake plains

*Position on the landform:* Summits

*Slope range:* 1 to 3 percent

*Texture of the surface layer:* Clay

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Moderately well drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* 2.1 feet (April)

*Deepest depth to wet zone:* 6.7 feet (transitory) (February)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 7.7 inches

*Content of organic matter in the upper 10 inches:* 2.5 percent

*Typical profile:*

Ap—0 to 8 inches; clay

Bk—8 to 22 inches; silty clay

C—22 to 80 inches; clay

### **Huot**

*Extent:* 1 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Moderately well drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 2.5 feet (April)

*Deepest depth to wet zone:* 6.7 feet (transitory) (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 7.6 inches

*Content of organic matter in the upper 10 inches:* 3 percent

*Typical profile:*

Ap,Ak—0 to 14 inches; fine sandy loam

Bk—14 to 26 inches; loamy fine sand

C1—26 to 34 inches; fine sand

2C2,2C3—34 to 80 inches; clay

## Major Uses of the Map Unit

- Cropland

## I10A—Clearwater mucky clay loam, depressional, 0 to 1 percent slopes

### Component Description

#### **Clearwater, depressional, and similar soils**

*Extent:* 85 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Mucky clay loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May)

*Deepest depth to wet zone:* 1.6 feet (February, August)

*Ponding depth:* 0.5 foot (all year)

*Available water capacity to a depth of 60 inches:* 9 inches

*Content of organic matter in the upper 10 inches:* 8.4 percent

*Typical profile:*

Ap—0 to 8 inches; mucky clay loam

Bss1,Bss2—8 to 35 inches; clay

Cg1,Cg2—35 to 80 inches; clay

#### **Clearwater**

*Extent:* 9 percent of the unit

*Geomorphic component:* Flats and swales on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Clay

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (April)

*Deepest depth to wet zone:* 3 feet (August)

*Months when ponding does not occur:* January, February, March, December

*Deepest ponding:* 0.3 foot (April, May, June, November)

*Available water capacity to a depth of 60 inches:* 8.2 inches

*Content of organic matter in the upper 10 inches:* 4.2 percent

*Typical profile:*

Ap—0 to 8 inches; clay

Bss1,Bss2—8 to 35 inches; clay

Cg1,Cg2—35 to 80 inches; clay

#### **Augsburg, depressional**

*Extent:* 3 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Mucky loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May)

*Deepest depth to wet zone:* 3 feet (February)

*Shallowest ponding:* 0.3 foot (July, August, September, October)

*Deepest ponding:* 0.5 foot (January, February, March, April, May, June, November, December)

*Available water capacity to a depth of 60 inches:* 10.3 inches

*Content of organic matter in the upper 10 inches:* 10 percent

*Typical profile:*

Ap,A—0 to 11 inches; mucky loam

Bkg—11 to 18 inches; very fine sandy loam

Bg1—18 to 33 inches; very fine sandy loam

2Bg2—33 to 60 inches; clay

### **Reis**

*Extent:* 2 percent of the unit

*Geomorphic component:* Flats and rises on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Clay

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 3.6 feet (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 8.3 inches

*Content of organic matter in the upper 10 inches:* 4.7 percent

*Typical profile:*

Ap—0 to 9 inches; clay

A/Bk—9 to 17 inches; clay

Bkss1,Bkss2—17 to 33 inches; clay

Bkg—33 to 42 inches; clay

Cg1,Cg2—42 to 60 inches; clay

C—60 to 80 inches; clay

### **Espelie**

*Extent:* 1 percent of the unit

*Geomorphic component:* Flats and swales on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 3.8 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, December

*Deepest ponding:* 0.3 foot (April, May, June)

*Available water capacity to a depth of 60 inches:* 7.1 inches

*Content of organic matter in the upper 10 inches:* 5.6 percent

*Typical profile:*

Ap—0 to 9 inches; fine sandy loam

Bw1,Bw2—9 to 24 inches; fine sand  
 2Bg-2Cg—24 to 80 inches; clay

### Major Uses of the Map Unit

- Pasture, hayland, wildlife habitat

## I11A—Deerwood muck, 0 to 1 percent slopes

### Component Description

#### Deerwood and similar soils

*Extent:* 85 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Muck

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Organic material over glaciolacustrine deposits

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May)

*Deepest depth to wet zone:* 2.5 feet (February)

*Shallowest ponding:* 0.3 foot (July, August, September)

*Deepest ponding:* 0.5 foot (January, February, March, April, May, June, October, November, December)

*Available water capacity to a depth of 60 inches:* 7.1 inches

*Content of organic matter in the upper 10 inches:* 75 percent

*Typical profile:*

Oa—0 to 10 inches; muck

A—10 to 12 inches; loamy sand

Cg1,Cg2—12 to 60 inches; sand

#### Rosewood

*Extent:* 6 percent of the unit

*Geomorphic component:* Swales and flats on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 4.9 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, September, November, December

*Deepest ponding:* 0.3 foot (April, May, June, October)

*Available water capacity to a depth of 60 inches:* 5.6 inches

*Content of organic matter in the upper 10 inches:* 5 percent

*Typical profile:*

Ap—0 to 8 inches; fine sandy loam

Bkg1,Bkg2—8 to 18 inches; fine sandy loam

Cg1-Cg3—18 to 80 inches; fine sand

#### Markey

*Extent:* 3 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent  
*Texture of the surface layer:* Muck  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Very poorly drained  
*Parent material:* Organic material over glaciolacustrine deposits  
*Flooding:* None  
*Shallowest depth to wet zone:* At the surface (March, April, May, June)  
*Deepest depth to wet zone:* 2.1 feet (February)  
*Shallowest ponding:* 0.3 foot (January, February, July, August, September, October, November, December)  
*Deepest ponding:* 0.5 foot (March, April, May, June)  
*Available water capacity to a depth of 60 inches:* 15.1 inches  
*Content of organic matter in the upper 10 inches:* 85 percent  
*Typical profile:*  
     Oa1-Oa4—0 to 32 inches; muck  
     Cg—32 to 60 inches; fine sand

### **Strathcona**

*Extent:* 2 percent of the unit  
*Geomorphic component:* Swales and flats on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 4.1 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, September, December  
*Deepest ponding:* 0.3 foot (April, May)  
*Available water capacity to a depth of 60 inches:* 9 inches  
*Content of organic matter in the upper 10 inches:* 6 percent  
*Typical profile:*  
     Ap—0 to 10 inches; fine sandy loam  
     Bkg—10 to 17 inches; fine sandy loam  
     Cg1—17 to 28 inches; fine sand  
     2Cg2,2Cg3—28 to 80 inches; loam

### **Syrene**

*Extent:* 2 percent of the unit  
*Geomorphic component:* Swales and flats on beach plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Beach deposits  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.3 foot (April)  
*Deepest depth to wet zone:* 3.3 feet (February, August)  
*Months when ponding does not occur:* January, February, March, July, August, September, October, November, December  
*Deepest ponding:* 0.3 foot (April, May)  
*Available water capacity to a depth of 60 inches:* 3.8 inches  
*Content of organic matter in the upper 10 inches:* 5.6 percent

*Typical profile:*

- Ap—0 to 9 inches; sandy loam
- Bkg1—9 to 17 inches; sandy loam
- 2Bkg2—17 to 27 inches; stratified loamy fine sand to gravelly coarse sand
- 2Cg—27 to 60 inches; stratified loamy fine sand to gravelly coarse sand

**Venlo**

- Extent:* 2 percent of the unit
- Geomorphic component:* Depressions on lake plains
- Slope range:* 0 to 1 percent
- Texture of the surface layer:* Fine sandy loam
- Depth to restrictive feature:* Very deep (more than 60 inches)
- Drainage class:* Very poorly drained
- Parent material:* Glaciolacustrine deposits
- Flooding:* None
- Shallowest depth to wet zone:* At the surface (April)
- Deepest depth to wet zone:* 3 feet (February, August)
- Shallowest ponding:* 0.3 foot (July, August, September, October)
- Deepest ponding:* 0.5 foot (January, February, March, April, May, June, November, December)
- Available water capacity to a depth of 60 inches:* 5.4 inches
- Content of organic matter in the upper 10 inches:* 10 percent
- Typical profile:*
  - A—0 to 13 inches; fine sandy loam
  - Cg1,Cg2—13 to 60 inches; fine sand

**Major Uses of the Map Unit**

- Pasture, hayland, wildlife habitat

**I12A—Eckvoll loamy fine sand, 0 to 3 percent slopes****Component Description****Eckvoll and similar soils**

- Extent:* 70 percent of the unit
- Geomorphic component:* Rises on lake plains
- Slope range:* 0 to 3 percent
- Texture of the surface layer:* Loamy fine sand
- Depth to restrictive feature:* Very deep (more than 60 inches)
- Drainage class:* Moderately well drained
- Parent material:* Glaciolacustrine deposits over till
- Flooding:* None
- Shallowest depth to wet zone:* 2.5 feet (April)
- Deepest depth to wet zone:* 6.7 feet (transitory) (August)
- Ponding:* None
- Available water capacity to a depth of 60 inches:* 8.3 inches
- Content of organic matter in the upper 10 inches:* 1.9 percent
- Typical profile:*
  - Ap—0 to 9 inches; loamy fine sand
  - E1,E2—9 to 25 inches; fine sand
  - 2Bt—25 to 32 inches; sandy clay loam
  - 2BCk,2C1,2C2—32 to 80 inches; loam

**Kratka**

- Extent:* 8 percent of the unit

*Geomorphic component:* Flats and swales on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 4.1 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, September, December  
*Deepest ponding:* 0.3 foot (April, May)  
*Available water capacity to a depth of 60 inches:* 9.1 inches  
*Content of organic matter in the upper 10 inches:* 6 percent  
*Typical profile:*  
     Ap,A—0 to 11 inches; fine sandy loam  
     Bg1,Bg2—11 to 18 inches; loamy fine sand  
     Cg1—18 to 25 inches; fine sand  
     2Cg2-2Cg4—25 to 80 inches; loam

### **Smiley**

*Extent:* 7 percent of the unit  
*Geomorphic component:* Swales and flats on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 3.8 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, December  
*Deepest ponding:* 0.3 foot (April, May, June, September, October, November)  
*Available water capacity to a depth of 60 inches:* 10.8 inches  
*Content of organic matter in the upper 10 inches:* 5 percent  
*Typical profile:*  
     Ap—0 to 12 inches; loam  
     Btg—12 to 19 inches; clay loam  
     Bkg1-Bkg3—19 to 42 inches; loam  
     Cg1,Cg2—42 to 80 inches; loam

### **Linveldt**

*Extent:* 5 percent of the unit  
*Geomorphic component:* Rises on lake plains  
*Slope range:* 0 to 3 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 2.5 feet (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 8.9 inches

*Content of organic matter in the upper 10 inches: 2.8 percent*

*Typical profile:*

- Ap—0 to 9 inches; fine sandy loam
- Bt—9 to 16 inches; loam
- 2Bw1,2Bw2—16 to 29 inches; sand
- 3Bk—29 to 45 inches; loam
- 3C1-3C3—45 to 80 inches; loam

### **Reiner**

*Extent: 5 percent of the unit*

*Geomorphic component: Rises on lake plains*

*Slope range: 0 to 3 percent*

*Texture of the surface layer: Fine sandy loam*

*Depth to restrictive feature: Very deep (more than 60 inches)*

*Drainage class: Moderately well drained*

*Parent material: Till*

*Flooding: None*

*Shallowest depth to wet zone: 2.5 feet (April)*

*Deepest depth to wet zone: 6.7 feet (transitory) (August)*

*Ponding: None*

*Available water capacity to a depth of 60 inches: 10.2 inches*

*Content of organic matter in the upper 10 inches: 2.3 percent*

*Typical profile:*

- Ap—0 to 7 inches; fine sandy loam
- Bt—7 to 17 inches; clay loam
- Bw,Bk1,Bk2—17 to 35 inches; loam
- C1-C3—35 to 80 inches; loam

### **Foldahl**

*Extent: 2 percent of the unit*

*Geomorphic component: Rises on lake plains*

*Slope range: 0 to 3 percent*

*Texture of the surface layer: Loamy fine sand*

*Depth to restrictive feature: Very deep (more than 60 inches)*

*Drainage class: Moderately well drained*

*Parent material: Glaciolacustrine deposits over till*

*Flooding: None*

*Shallowest depth to wet zone: 2.5 feet (April)*

*Deepest depth to wet zone: 6.7 feet (transitory) (August)*

*Ponding: None*

*Available water capacity to a depth of 60 inches: 8.3 inches*

*Content of organic matter in the upper 10 inches: 3 percent*

*Typical profile:*

- Ap,A—0 to 12 inches; loamy fine sand
- Bw1,Bw2—12 to 30 inches; fine sand
- 2BCk-2C3—30 to 80 inches; loam

### **Pelan**

*Extent: 2 percent of the unit*

*Geomorphic component: Rises on lake plains*

*Slope range: 0 to 3 percent*

*Texture of the surface layer: Sandy loam*

*Depth to restrictive feature: Very deep (more than 60 inches)*

*Drainage class: Moderately well drained*

*Parent material: Glaciolacustrine deposits over till*

*Flooding: None*

*Shallowest depth to wet zone:* 2.5 feet (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 8.5 inches  
*Content of organic matter in the upper 10 inches:* 1.4 percent  
*Typical profile:*  
     Ap—0 to 6 inches; sandy loam  
     E—6 to 9 inches; sand  
     Bt—9 to 14 inches; very gravelly sandy loam  
     Bw—14 to 20 inches; very gravelly coarse sand  
     2Bw—20 to 60 inches; loam

### **Poppleton**

*Extent:* 1 percent of the unit  
*Geomorphic component:* Rises on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Fine sand  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Glaciolacustrine deposits  
*Flooding:* None  
*Shallowest depth to wet zone:* 2.5 feet (April)  
*Deepest depth to wet zone:* More than 6.7 feet (July, August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 5 inches  
*Content of organic matter in the upper 10 inches:* 1 percent  
*Typical profile:*  
     Ap—0 to 6 inches; fine sand  
     E—6 to 9 inches; fine sand  
     Bw1-Bw4—9 to 40 inches; fine sand  
     C1,C2—40 to 60 inches; fine sand

### **Major Uses of the Map Unit**

- Cropland, pasture, hayland

## **I13A—Espelie fine sandy loam, 0 to 2 percent slopes**

### **Component Description**

#### **Espelie and similar soils**

*Extent:* 75 percent of the unit  
*Geomorphic component:* Swales and flats on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 3.8 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, December  
*Deepest ponding:* 0.3 foot (April, May, June)  
*Available water capacity to a depth of 60 inches:* 7.1 inches  
*Content of organic matter in the upper 10 inches:* 5.6 percent

*Typical profile:*

Ap—0 to 9 inches; fine sandy loam  
 Bw1,Bw2—9 to 24 inches; fine sand  
 2Bg-2Cg—24 to 80 inches; clay

**Foxlake**

*Extent:* 8 percent of the unit  
*Geomorphic component:* Swales and flats on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Till  
*Flooding:* None  
*Shallowest depth to wet zone:* At the surface (April)  
*Deepest depth to wet zone:* 3 feet (August)  
*Months when ponding does not occur:* January, February, March, December  
*Deepest ponding:* 0.3 foot (April, May, June, November)  
*Available water capacity to a depth of 60 inches:* 8.9 inches  
*Content of organic matter in the upper 10 inches:* 5 percent  
*Typical profile:*

Ap,A—0 to 19 inches; loam  
 Bg—19 to 38 inches; silty clay  
 Bkg—38 to 49 inches; clay  
 Cg—49 to 80 inches; clay

**Hilaire**

*Extent:* 7 percent of the unit  
*Geomorphic component:* Rises on lake plains  
*Slope range:* 0 to 3 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 2.5 feet (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 6.4 inches  
*Content of organic matter in the upper 10 inches:* 3 percent  
*Typical profile:*

Ap,A—0 to 10 inches; fine sandy loam  
 Bw1-Bw4—10 to 34 inches; fine sand  
 2BCk—34 to 80 inches; clay

**Clearwater, depressional**

*Extent:* 5 percent of the unit  
*Geomorphic component:* Depressions on lake plains  
*Slope range:* 0 to 1 percent  
*Texture of the surface layer:* Mucky clay loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Very poorly drained  
*Parent material:* Till  
*Flooding:* None  
*Shallowest depth to wet zone:* At the surface (March, April, May)  
*Deepest depth to wet zone:* 1.6 feet (February, August)

*Ponding depth:* 0.5 foot (all year)  
*Available water capacity to a depth of 60 inches:* 9 inches  
*Content of organic matter in the upper 10 inches:* 8.4 percent  
*Typical profile:*  
 Ap—0 to 8 inches; mucky clay loam  
 Bss1,Bss2—8 to 35 inches; clay  
 Cg1,Cg2—35 to 80 inches; clay

### **Thiefriver**

*Extent:* 5 percent of the unit  
*Geomorphic component:* Flats and swales on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 3.8 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, December  
*Deepest ponding:* 0.3 foot (April, May, June)  
*Available water capacity to a depth of 60 inches:* 7.5 inches  
*Content of organic matter in the upper 10 inches:* 6 percent  
*Typical profile:*  
 Ap,A—0 to 12 inches; fine sandy loam  
 Bkg1-Bkg3—12 to 23 inches; loamy fine sand  
 Cg1—23 to 32 inches; fine sand  
 2Cg2,2Cg3—32 to 80 inches; clay

### **Major Uses of the Map Unit**

- Cropland, pasture, hayland

## **I14B—Fairdale silt loam, 1 to 6 percent slopes, occasionally flooded**

### **Component Description**

#### **Fairdale and similar soils**

*Extent:* 85 percent of the unit  
*Geomorphic component:* Rises on flood plains; stream terraces  
*Slope range:* 1 to 6 percent  
*Texture of the surface layer:* Silt loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Alluvium  
*Months in which flooding does not occur:* January, February, November, December  
*Highest frequency of flooding:* Occasional (March, April, May, June)  
*Shallowest depth to wet zone:* 2.5 feet (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 12.3 inches  
*Content of organic matter in the upper 10 inches:* 3.4 percent

*Typical profile:*

- Ap—0 to 7 inches; silt loam
- C1-C3—7 to 48 inches; stratified very fine sandy loam to silty clay loam
- Ab1, Ab2—48 to 67 inches; silty clay loam
- C'—67 to 80 inches; stratified very fine sandy loam to silty clay loam

**Fluvaquents**

- Extent:* 6 percent of the unit
- Geomorphic component:* Flats and swales on flood plains
- Slope range:* 0 to 2 percent
- Texture of the surface layer:* Fine sandy loam
- Depth to restrictive feature:* Very deep (more than 60 inches)
- Drainage class:* Very poorly drained
- Parent material:* Alluvium
- Months in which flooding does not occur:* January, February, December
- Highest frequency of flooding:* Very frequent (April, May)
- Shallowest depth to wet zone:* At the surface (March, April, May)
- Deepest depth to wet zone:* 1.6 feet (February, August)
- Shallowest ponding:* 0.5 foot (January, February, March, June, July, August, September, October, November, December)
- Deepest ponding:* 0.7 foot (April, May)
- Available water capacity to a depth of 60 inches:* 8.1 inches
- Content of organic matter in the upper 10 inches:* 5 percent
- Typical profile:*
  - A—0 to 16 inches; fine sandy loam
  - Cg—16 to 80 inches; stratified loamy sand to silt loam

**Hapludolls**

- Extent:* 5 percent of the unit
- Geomorphic component:* Hillslopes in drainageways; escarpments in drainageways
- Slope range:* 2 to 30 percent
- Texture of the surface layer:* Loam
- Depth to restrictive feature:* Very deep (more than 60 inches)
- Drainage class:* Well drained
- Parent material:* Glaciolacustrine deposits and/or till
- Months in which flooding does not occur:* January, February, December
- Highest frequency of flooding:* Rare (March, April, May, June, September, October, November)
- Shallowest depth to wet zone:* 6.7 feet (transitory) (March, April, May, November)
- Deepest depth to wet zone:* More than 6.7 feet (January, February, June, July, August, September, October, December)
- Ponding:* None
- Available water capacity to a depth of 60 inches:* 10.4 inches
- Content of organic matter in the upper 10 inches:* 1.9 percent
- Typical profile:*
  - A—0 to 9 inches; loam
  - C—9 to 60 inches; loam

**Hapludalfs**

- Extent:* 2 percent of the unit
- Geomorphic component:* Escarpments in drainageways; hillslopes in drainageways
- Slope range:* 3 to 60 percent
- Texture of the surface layer:* Fine sandy loam
- Depth to restrictive feature:* Very deep (more than 60 inches)
- Drainage class:* Moderately well drained

*Parent material:* Glaciolacustrine deposits and till

*Months in which flooding does not occur:* January, February, December

*Highest frequency of flooding:* Rare (March, April, May, June, September, October, November)

*Shallowest depth to wet zone:* 2.5 feet (April)

*Deepest depth to wet zone:* 6.7 feet (transitory) (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 10.1 inches

*Content of organic matter in the upper 10 inches:* 0.9 percent

*Typical profile:*

A—0 to 6 inches; fine sandy loam

E—6 to 8 inches; fine sandy loam

Bt1,Bt2—8 to 25 inches; silty clay loam

C1,C2—25 to 80 inches; silt loam

### **Zell**

*Extent:* 2 percent of the unit

*Geomorphic component:* Escarpments on lake plains

*Position on the landform:* Backslopes and shoulders

*Slope range:* 6 to 20 percent

*Texture of the surface layer:* Silt loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Well drained

*Parent material:* Glaciolacustrine deposits

*Flooding:* None

*Depth to wet zone:* More than 6.7 feet (all year)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 10.1 inches

*Content of organic matter in the upper 10 inches:* 2 percent

*Typical profile:*

A—0 to 6 inches; silt loam

Bk-Bky—6 to 26 inches; silt loam

C—26 to 60 inches; very fine sandy loam

### **Major Uses of the Map Unit**

- Cropland, pasture, hayland

## **I14D—Fairdale silt loam, 6 to 15 percent slopes, occasionally flooded**

### **Component Description**

#### **Fairdale and similar soils**

*Extent:* 85 percent of the unit

*Geomorphic component:* Rises on flood plains; stream terraces

*Slope range:* 6 to 15 percent

*Texture of the surface layer:* Silt loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Moderately well drained

*Parent material:* Alluvium

*Months in which flooding does not occur:* January, February, November, December

*Highest frequency of flooding:* Occasional (March, April, May, June)

*Shallowest depth to wet zone:* 2.5 feet (April)

*Deepest depth to wet zone:* 6.7 feet (transitory) (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 12.3 inches

*Content of organic matter in the upper 10 inches:* 3.4 percent

*Typical profile:*

Ap—0 to 7 inches; silt loam

C1-C3—7 to 48 inches; stratified very fine sandy loam to silty clay loam

Ab1,Ab2—48 to 67 inches; silty clay loam

C'—67 to 80 inches; stratified very fine sandy loam to silty clay loam

### **Fluvaquents**

*Extent:* 6 percent of the unit

*Geomorphic component:* Swales and flats on flood plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Alluvium

*Months in which flooding does not occur:* January, February, December

*Highest frequency of flooding:* Very frequent (April, May)

*Shallowest depth to wet zone:* At the surface (March, April, May)

*Deepest depth to wet zone:* 1.6 feet (February, August)

*Shallowest ponding:* 0.5 foot (January, February, March, June, July, August, September, October, November, December)

*Deepest ponding:* 0.7 foot (April, May)

*Available water capacity to a depth of 60 inches:* 8.1 inches

*Content of organic matter in the upper 10 inches:* 5 percent

*Typical profile:*

A—0 to 16 inches; fine sandy loam

Cg—16 to 80 inches; stratified loamy sand to silt loam

### **Hapludolls**

*Extent:* 4 percent of the unit

*Geomorphic component:* Escarpments in drainageways; hillslopes in drainageways

*Slope range:* 2 to 30 percent

*Texture of the surface layer:* Loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Well drained

*Parent material:* Glaciolacustrine deposits and/or till

*Months in which flooding does not occur:* February, December

*Highest frequency of flooding:* Rare (March, April, May, June, September, October, November)

*Shallowest depth to wet zone:* 6.7 feet (transitory) (March, April, May, November)

*Deepest depth to wet zone:* More than 6.7 feet (February, June, July, August, September, October, December)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 10.4 inches

*Content of organic matter in the upper 10 inches:* 1.9 percent

*Typical profile:*

A—0 to 9 inches; loam

C—9 to 60 inches; loam

### **Zell**

*Extent:* 3 percent of the unit

*Geomorphic component:* Escarpments on lake plains

*Position on the landform:* Backslopes and shoulders

*Slope range:* 6 to 20 percent

*Texture of the surface layer:* Silt loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Well drained  
*Parent material:* Glaciolacustrine deposits  
*Flooding:* None  
*Depth to wet zone:* More than 6.7 feet (all year)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 10.1 inches  
*Content of organic matter in the upper 10 inches:* 2 percent  
*Typical profile:*  
     A—0 to 6 inches; silt loam  
     Bk-Bky—6 to 26 inches; silt loam  
     C—26 to 60 inches; very fine sandy loam

### **Hapludalfs**

*Extent:* 2 percent of the unit  
*Geomorphic component:* Escarpments in drainageways; hillslopes in drainageways  
*Slope range:* 3 to 60 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Glaciolacustrine deposits and till  
*Months in which flooding does not occur:* January, February, December  
*Highest frequency of flooding:* Rare (March, April, May, June, September, October, November)  
*Shallowest depth to wet zone:* 2.5 feet (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 10.1 inches  
*Content of organic matter in the upper 10 inches:* 0.9 percent  
*Typical profile:*  
     A—0 to 6 inches; fine sandy loam  
     E—6 to 8 inches; fine sandy loam  
     Bt1,Bt2—8 to 25 inches; silty clay loam  
     C1,C2—25 to 80 inches; silt loam

### **Major Uses of the Map Unit**

- Pasture, hayland

## **I15A—Flaming loamy fine sand, 0 to 3 percent slopes**

### **Component Description**

#### **Flaming and similar soils**

*Extent:* 70 percent of the unit  
*Geomorphic component:* Rises on lake plains  
*Slope range:* 0 to 3 percent  
*Texture of the surface layer:* Loamy fine sand  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Glaciolacustrine deposits  
*Flooding:* None  
*Shallowest depth to wet zone:* 2.5 feet (April)  
*Deepest depth to wet zone:* More than 6.7 feet (July, August)  
*Ponding:* None

*Available water capacity to a depth of 60 inches:* 4.9 inches

*Content of organic matter in the upper 10 inches:* 3 percent

*Typical profile:*

Ap,A—0 to 12 inches; loamy fine sand

BA—12 to 17 inches; fine sand

Bw—17 to 27 inches; fine sand

C1,C2—27 to 60 inches; fine sand

### **Garborg**

*Extent:* 10 percent of the unit

*Geomorphic component:* Flats and rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Loamy fine sand

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Somewhat poorly drained

*Parent material:* Glaciolacustrine deposits

*Flooding:* None

*Shallowest depth to wet zone:* 1.5 feet (April)

*Deepest depth to wet zone:* More than 6.7 feet (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 5.2 inches

*Content of organic matter in the upper 10 inches:* 4 percent

*Typical profile:*

Ap,A—0 to 12 inches; loamy fine sand

Bw1-Bw3—12 to 41 inches; loamy fine sand

BCK—41 to 59 inches; fine sand

C1,C2—59 to 80 inches; fine sand

### **Hamar**

*Extent:* 5 percent of the unit

*Geomorphic component:* Flats and swales on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Loamy fine sand

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 4.9 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, September, November, December

*Deepest ponding:* 0.3 foot (April, May, June, October)

*Available water capacity to a depth of 60 inches:* 5 inches

*Content of organic matter in the upper 10 inches:* 6 percent

*Typical profile:*

A1,A2—0 to 12 inches; loamy fine sand

AC—12 to 17 inches; loamy fine sand

C1,C2—17 to 40 inches; fine sand

Ab—40 to 47 inches; loamy fine sand

Cg—47 to 60 inches; fine sand

### **Ulen**

*Extent:* 5 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Moderately well drained

*Parent material:* Glaciolacustrine deposits

*Flooding:* None

*Shallowest depth to wet zone:* 2 feet (April)

*Deepest depth to wet zone:* More than 6.7 feet (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 5.8 inches

*Content of organic matter in the upper 10 inches:* 2.8 percent

*Typical profile:*

Ap—0 to 9 inches; fine sandy loam

Bk1,Bk2—9 to 42 inches; loamy fine sand

C—42 to 60 inches; fine sand

### **Poppleton**

*Extent:* 3 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Fine sand

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Moderately well drained

*Parent material:* Glaciolacustrine deposits

*Flooding:* None

*Shallowest depth to wet zone:* 2.5 feet (April)

*Deepest depth to wet zone:* More than 6.7 feet (July, August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 5 inches

*Content of organic matter in the upper 10 inches:* 1 percent

*Typical profile:*

Ap—0 to 6 inches; fine sand

E—6 to 9 inches; fine sand

Bw1-Bw4—9 to 40 inches; fine sand

C1,C2—40 to 60 inches; fine sand

### **Sandberg**

*Extent:* 3 percent of the unit

*Geomorphic component:* Beach ridges

*Position on the landform:* Shoulders, summits, and backslopes

*Slope range:* 1 to 6 percent

*Texture of the surface layer:* Loamy sand

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Excessively drained

*Parent material:* Beach deposits

*Flooding:* None

*Depth to wet zone:* More than 6.7 feet (all year)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 3.1 inches

*Content of organic matter in the upper 10 inches:* 2 percent

*Typical profile:*

Ap,A—0 to 12 inches; loamy sand

Bw—12 to 19 inches; gravelly loamy coarse sand

Bk—19 to 29 inches; gravelly coarse sand

C—29 to 80 inches; gravelly coarse sand

### **Foldahl**

*Extent:* 2 percent of the unit

*Geomorphic component:* Rises on lake plains  
*Slope range:* 0 to 3 percent  
*Texture of the surface layer:* Loamy fine sand  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 2.5 feet (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 8.3 inches  
*Content of organic matter in the upper 10 inches:* 3 percent  
*Typical profile:*  
     Ap,A—0 to 12 inches; loamy fine sand  
     Bw1,Bw2—12 to 30 inches; fine sand  
     2BCk-2C3—30 to 80 inches; loam

### **Radium**

*Extent:* 2 percent of the unit  
*Geomorphic component:* Beach ridges  
*Position on the landform:* Backslopes  
*Slope range:* 0 to 3 percent  
*Texture of the surface layer:* Loamy sand  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Beach deposits  
*Flooding:* None  
*Shallowest depth to wet zone:* 3 feet (April)  
*Deepest depth to wet zone:* More than 6.7 feet (July, August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 3.8 inches  
*Content of organic matter in the upper 10 inches:* 2 percent  
*Typical profile:*  
     Ap—0 to 14 inches; loamy sand  
     Bw1,Bw2—14 to 33 inches; sand  
     C1—33 to 43 inches; very gravelly coarse sand  
     C2-C4—43 to 80 inches; sand

### **Major Uses of the Map Unit**

- Cropland, pasture, hayland

## **I16F—Fluvaquents, frequently flooded-Hapludolls complex, 0 to 30 percent slopes**

### **Component Description**

#### **Fluvaquents and similar soils**

*Extent:* 55 percent of the unit  
*Geomorphic component:* Flats and swales on flood plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Very poorly drained  
*Parent material:* Alluvium

*Months in which flooding does not occur:* January, February, December  
*Highest frequency of flooding:* Very frequent (April, May)  
*Shallowest depth to wet zone:* At the surface (March, April, May)  
*Deepest depth to wet zone:* 1.6 feet (February, August)  
*Shallowest ponding:* 0.5 foot (January, February, March, June, July, August, September, October, November, December)  
*Deepest ponding:* 0.7 foot (April, May)  
*Available water capacity to a depth of 60 inches:* 8.1 inches  
*Content of organic matter in the upper 10 inches:* 5 percent  
*Typical profile:*  
     A—0 to 16 inches; fine sandy loam  
     Cg—16 to 80 inches; stratified loamy sand to silt loam

#### **Hapludolls and similar soils**

*Extent:* 25 percent of the unit  
*Geomorphic component:* Escarpments in drainageways; hillslopes in drainageways  
*Slope range:* 2 to 30 percent  
*Texture of the surface layer:* Loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Well drained  
*Parent material:* Glaciolacustrine deposits and/or till  
*Months in which flooding does not occur:* January, February, December  
*Highest frequency of flooding:* Rare (March, April, May, June, September, October, November)  
*Shallowest depth to wet zone:* 6.7 feet (transitory) (March, April, May, November)  
*Deepest depth to wet zone:* More than 6.7 feet (January, February, June, July, August, September, October, December)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 10.4 inches  
*Content of organic matter in the upper 10 inches:* 1.9 percent  
*Typical profile:*  
     A—0 to 9 inches; loam  
     C—9 to 60 inches; loam

#### **Hapludalfs**

*Extent:* 7 percent of the unit  
*Geomorphic component:* Hillslopes in drainageways; escarpments in drainageways  
*Slope range:* 3 to 60 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Glaciolacustrine deposits and till  
*Months in which flooding does not occur:* January, February, December  
*Highest frequency of flooding:* Rare (March, April, May, June, September, October, November)  
*Shallowest depth to wet zone:* 2.5 feet (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 10.1 inches  
*Content of organic matter in the upper 10 inches:* 0.9 percent  
*Typical profile:*  
     A—0 to 6 inches; fine sandy loam  
     E—6 to 8 inches; fine sandy loam  
     Bt1,Bt2—8 to 25 inches; silty clay loam  
     C1,C2—25 to 80 inches; silt loam

**Fairdale**

*Extent:* 5 percent of the unit

*Geomorphic component:* Rises on flood plains; stream terraces

*Slope range:* 6 to 15 percent

*Texture of the surface layer:* Silt loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Moderately well drained

*Parent material:* Alluvium

*Months in which flooding does not occur:* January, February, November, December

*Highest frequency of flooding:* Occasional (March, April, May, June)

*Shallowest depth to wet zone:* 2.5 feet (April)

*Deepest depth to wet zone:* 6.7 feet (transitory) (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 12.3 inches

*Content of organic matter in the upper 10 inches:* 3.4 percent

*Typical profile:*

Ap—0 to 7 inches; silt loam

C1-C3—7 to 48 inches; stratified very fine sandy loam to silty clay loam

Ab1,Ab2—48 to 67 inches; silty clay loam

C'—67 to 80 inches; stratified very fine sandy loam to silty clay loam

**Water**

*Extent:* 5 percent of the unit

**Bowstring**

*Extent:* 2 percent of the unit

*Geomorphic component:* Swales on flood plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Muck

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Organic material over alluvium

*Months in which flooding does not occur:* January, February, December

*Highest frequency of flooding:* Very frequent (April, May)

*Shallowest depth to wet zone:* At the surface (March, April, May, June)

*Deepest depth to wet zone:* 2.1 feet (February)

*Shallowest ponding:* 0.3 foot (January, February, July, August, September, October, November, December)

*Deepest ponding:* 0.5 foot (March, April, May, June, November)

*Available water capacity to a depth of 60 inches:* 21.4 inches

*Content of organic matter in the upper 10 inches:* 65 percent

*Typical profile:*

Oa1,Oa2—0 to 38 inches; muck

Cg—38 to 47 inches; stratified sand to fine sandy loam

O'a—47 to 80 inches; muck

**Rauville**

*Extent:* 1 percent of the unit

*Geomorphic component:* Oxbows on flood plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Silty clay loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Alluvium

*Months in which flooding does not occur:* January, February, December

*Highest frequency of flooding:* Very frequent (April, May)

*Shallowest depth to wet zone:* At the surface (March, April, May)

*Deepest depth to wet zone:* 1.6 feet (February, August)

*Shallowest ponding:* 0.5 foot (January, February, March, June, July, August, September, October, November, December)

*Deepest ponding:* 0.7 foot (April, May)

*Available water capacity to a depth of 60 inches:* 10.9 inches

*Content of organic matter in the upper 10 inches:* 6 percent

*Typical profile:*

A1,A2—0 to 27 inches; silty clay loam

Cg—27 to 45 inches; silty clay loam

2Cg—45 to 60 inches; stratified gravelly loamy sand to clay loam

### **Major Uses of the Map Unit**

- Wildlife habitat, recreational development

## **I17A—Foldahl fine sandy loam, 0 to 3 percent slopes**

### **Component Description**

#### **Foldahl and similar soils**

*Extent:* 75 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Moderately well drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 2.5 feet (April)

*Deepest depth to wet zone:* 6.7 feet (transitory) (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 8.8 inches

*Content of organic matter in the upper 10 inches:* 3 percent

*Typical profile:*

Ap,A—0 to 12 inches; fine sandy loam

Bw1,Bw2—12 to 30 inches; fine sand

2BCk-2C3—30 to 80 inches; loam

#### **Kratka**

*Extent:* 10 percent of the unit

*Geomorphic component:* Swales and flats on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 4.1 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, September, December

*Deepest ponding:* 0.3 foot (April, May)

*Available water capacity to a depth of 60 inches:* 9.1 inches

*Content of organic matter in the upper 10 inches:* 6 percent

*Typical profile:*

Ap,A—0 to 11 inches; fine sandy loam  
 Bg1,Bg2—11 to 18 inches; loamy fine sand  
 Cg1—18 to 25 inches; fine sand  
 2Cg2-2Cg4—25 to 80 inches; loam

**Roliss**

*Extent:* 5 percent of the unit  
*Geomorphic component:* Flats and swales on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 3.8 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, December  
*Deepest ponding:* 0.3 foot (April, May, June, September, October, November)  
*Available water capacity to a depth of 60 inches:* 10.7 inches  
*Content of organic matter in the upper 10 inches:* 5 percent  
*Typical profile:*  
 Ap,A—0 to 14 inches; loam  
 Bg—14 to 20 inches; loam  
 Cg1-Cg4—20 to 80 inches; loam

**Flaming**

*Extent:* 4 percent of the unit  
*Geomorphic component:* Rises on lake plains  
*Slope range:* 0 to 3 percent  
*Texture of the surface layer:* Loamy fine sand  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Glaciolacustrine deposits  
*Flooding:* None  
*Shallowest depth to wet zone:* 2.5 feet (April)  
*Deepest depth to wet zone:* More than 6.7 feet (July, August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 4.9 inches  
*Content of organic matter in the upper 10 inches:* 3 percent  
*Typical profile:*  
 Ap,A—0 to 12 inches; loamy fine sand  
 BA—12 to 17 inches; fine sand  
 Bw—17 to 27 inches; fine sand  
 C1,C2—27 to 60 inches; fine sand

**Grimstad**

*Extent:* 2 percent of the unit  
*Geomorphic component:* Rises on lake plains  
*Slope range:* 0 to 3 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Somewhat poorly drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None

*Shallowest depth to wet zone:* 1.5 feet (April)  
*Deepest depth to wet zone:* More than 6.7 feet (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 9.2 inches  
*Content of organic matter in the upper 10 inches:* 2.8 percent  
*Typical profile:*  
     Ap—0 to 9 inches; fine sandy loam  
     Bk1,Bk2—9 to 22 inches; loamy fine sand  
     C1—22 to 28 inches; fine sand  
     2C2,2C3—28 to 60 inches; loam

### **Linveldt**

*Extent:* 2 percent of the unit  
*Geomorphic component:* Rises on lake plains  
*Slope range:* 0 to 3 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 2.5 feet (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 8.9 inches  
*Content of organic matter in the upper 10 inches:* 2.8 percent  
*Typical profile:*  
     Ap—0 to 9 inches; fine sandy loam  
     Bt—9 to 16 inches; loam  
     2Bw1,2Bw2—16 to 29 inches; sand  
     3Bk—29 to 45 inches; loam  
     3C1-3C3—45 to 80 inches; loam

### **Eckvoll**

*Extent:* 1 percent of the unit  
*Geomorphic component:* Rises on lake plains  
*Slope range:* 0 to 3 percent  
*Texture of the surface layer:* Loamy fine sand  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 2.5 feet (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 8.3 inches  
*Content of organic matter in the upper 10 inches:* 1.9 percent  
*Typical profile:*  
     Ap—0 to 9 inches; loamy fine sand  
     E1,E2—9 to 25 inches; fine sand  
     2Bt—25 to 32 inches; sandy clay loam  
     2Bck-2C1,2C2—32 to 80 inches; loam

### **Strathcona**

*Extent:* 1 percent of the unit  
*Geomorphic component:* Flats and swales on lake plains  
*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 4.1 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, September, December  
*Deepest ponding:* 0.3 foot (April, May)  
*Available water capacity to a depth of 60 inches:* 9 inches  
*Content of organic matter in the upper 10 inches:* 6 percent  
*Typical profile:*  
     Ap—0 to 10 inches; fine sandy loam  
     Bkg—10 to 17 inches; fine sandy loam  
     Cg1—17 to 28 inches; fine sand  
     2Cg2,2Cg3—28 to 80 inches; loam

### Major Uses of the Map Unit

- Cropland, pasture, hayland

## I18A—Foldahl loamy fine sand, 0 to 3 percent slopes

### Component Description

#### Foldahl and similar soils

*Extent:* 75 percent of the unit  
*Geomorphic component:* Rises on lake plains  
*Slope range:* 0 to 3 percent  
*Texture of the surface layer:* Loamy fine sand  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 2.5 feet (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 8.3 inches  
*Content of organic matter in the upper 10 inches:* 3 percent  
*Typical profile:*  
     Ap,A—0 to 12 inches; loamy fine sand  
     Bw1,Bw2—12 to 30 inches; fine sand  
     2BCk-2C3—30 to 80 inches; loam

#### Kratka

*Extent:* 10 percent of the unit  
*Geomorphic component:* Flats and swales on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 4.1 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, September, December

*Deepest ponding:* 0.3 foot (April, May)

*Available water capacity to a depth of 60 inches:* 9.1 inches

*Content of organic matter in the upper 10 inches:* 6 percent

*Typical profile:*

Ap,A—0 to 11 inches; fine sandy loam

Bg1,Bg2—11 to 18 inches; loamy fine sand

Cg1—18 to 25 inches; fine sand

2Cg2-2Cg4—25 to 80 inches; loam

### **Roliss**

*Extent:* 5 percent of the unit

*Geomorphic component:* Swales and flats on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 3.8 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, December

*Deepest ponding:* 0.3 foot (April, May, June, September, October, November)

*Available water capacity to a depth of 60 inches:* 10.7 inches

*Content of organic matter in the upper 10 inches:* 5 percent

*Typical profile:*

Ap,A—0 to 14 inches; loam

Bg—14 to 20 inches; loam

Cg1-Cg4—20 to 80 inches; loam

### **Flaming**

*Extent:* 4 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Loamy fine sand

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Moderately well drained

*Parent material:* Glaciolacustrine deposits

*Flooding:* None

*Shallowest depth to wet zone:* 2.5 feet (April)

*Deepest depth to wet zone:* More than 6.7 feet (July, August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 4.9 inches

*Content of organic matter in the upper 10 inches:* 3 percent

*Typical profile:*

Ap,A—0 to 12 inches; loamy fine sand

BA—12 to 17 inches; fine sand

Bw—17 to 27 inches; fine sand

C1,C2—27 to 60 inches; fine sand

### **Grimstad**

*Extent:* 2 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Somewhat poorly drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 1.5 feet (April)  
*Deepest depth to wet zone:* More than 6.7 feet (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 9.2 inches  
*Content of organic matter in the upper 10 inches:* 2.8 percent  
*Typical profile:*  
     Ap—0 to 9 inches; fine sandy loam  
     Bk1,Bk2—9 to 22 inches; loamy fine sand  
     C1—22 to 28 inches; fine sand  
     2C2,2C3—28 to 60 inches; loam

### **Linveldt**

*Extent:* 2 percent of the unit  
*Geomorphic component:* Rises on lake plains  
*Slope range:* 0 to 3 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 2.5 feet (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 8.9 inches  
*Content of organic matter in the upper 10 inches:* 2.8 percent  
*Typical profile:*  
     Ap—0 to 9 inches; fine sandy loam  
     Bt—9 to 16 inches; loam  
     2Bw1,2Bw2—16 to 29 inches; sand  
     3Bk—29 to 45 inches; loam  
     3C1-3C3—45 to 80 inches; loam

### **Eckvoll**

*Extent:* 1 percent of the unit  
*Geomorphic component:* Rises on lake plains  
*Slope range:* 0 to 3 percent  
*Texture of the surface layer:* Loamy fine sand  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 2.5 feet (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 8.3 inches  
*Content of organic matter in the upper 10 inches:* 1.9 percent  
*Typical profile:*  
     Ap—0 to 9 inches; loamy fine sand  
     E1,E2—9 to 25 inches; fine sand

2Bt—25 to 32 inches; sandy clay loam  
 2BCk-2C1,2C2—32 to 80 inches; loam

### **Strathcona**

*Extent:* 1 percent of the unit  
*Geomorphic component:* Swales and flats on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 4.1 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, September, December  
*Deepest ponding:* 0.3 foot (April, May)  
*Available water capacity to a depth of 60 inches:* 9 inches  
*Content of organic matter in the upper 10 inches:* 6 percent  
*Typical profile:*  
 Ap—0 to 10 inches; fine sandy loam  
 Bkg—10 to 17 inches; fine sandy loam  
 Cg1—17 to 28 inches; fine sand  
 2Cg2,2Cg3—28 to 80 inches; loam

### **Major Uses of the Map Unit**

- Cropland, pasture, hayland

## **I19A—Foxhome sandy loam, 0 to 3 percent slopes**

### **Component Description**

#### **Foxhome and similar soils**

*Extent:* 65 percent of the unit  
*Geomorphic component:* Rises on lake plains  
*Slope range:* 0 to 3 percent  
*Texture of the surface layer:* Sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 2.5 feet (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 8.6 inches  
*Content of organic matter in the upper 10 inches:* 3 percent  
*Typical profile:*  
 Ap—0 to 10 inches; sandy loam  
 Bw1—10 to 15 inches; sand  
 2Bw2—15 to 23 inches; very gravelly coarse sand  
 3C1-3C3—23 to 80 inches; loam

#### **Kittson**

*Extent:* 10 percent of the unit  
*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent  
*Texture of the surface layer:* Loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 2.5 feet (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 10.5 inches  
*Content of organic matter in the upper 10 inches:* 3 percent  
*Typical profile:*  
     Ap—0 to 10 inches; loam  
     Bw—10 to 17 inches; fine sandy loam  
     2Bk1,2Bk2—17 to 36 inches; loam  
     2C—36 to 60 inches; loam

### **Strandquist**

*Extent:* 10 percent of the unit  
*Geomorphic component:* Swales and flats on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 4.1 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, September, November, December  
*Deepest ponding:* 0.3 foot (April, May, June, October)  
*Available water capacity to a depth of 60 inches:* 9.3 inches  
*Content of organic matter in the upper 10 inches:* 6 percent  
*Typical profile:*  
     Ap—0 to 10 inches; loam  
     2Bg1—10 to 20 inches; very gravelly sand  
     3Bg2,3Cg—20 to 60 inches; loam

### **Foldahl**

*Extent:* 5 percent of the unit  
*Geomorphic component:* Rises on lake plains  
*Slope range:* 0 to 3 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 2.5 feet (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 8.8 inches  
*Content of organic matter in the upper 10 inches:* 3 percent  
*Typical profile:*  
     Ap,A—0 to 12 inches; fine sandy loam

Bw1,Bw2—12 to 30 inches; fine sand  
2BCK-2C3—30 to 80 inches; loam

### **Grimstad**

*Extent:* 5 percent of the unit  
*Geomorphic component:* Rises on lake plains  
*Slope range:* 0 to 3 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Somewhat poorly drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 1.5 feet (April)  
*Deepest depth to wet zone:* More than 6.7 feet (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 9.2 inches  
*Content of organic matter in the upper 10 inches:* 2.8 percent  
*Typical profile:*  
Ap—0 to 9 inches; fine sandy loam  
Bk1,Bk2—9 to 22 inches; loamy fine sand  
C1—22 to 28 inches; fine sand  
2C2,2C3—28 to 60 inches; loam

### **Roliss**

*Extent:* 3 percent of the unit  
*Geomorphic component:* Flats and swales on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 3.8 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, December  
*Deepest ponding:* 0.3 foot (April, May, June, September, October, November)  
*Available water capacity to a depth of 60 inches:* 10.7 inches  
*Content of organic matter in the upper 10 inches:* 5 percent  
*Typical profile:*  
Ap,A—0 to 14 inches; loam  
Bg—14 to 20 inches; loam  
Cg1-Cg4—20 to 80 inches; loam

### **Mavie**

*Extent:* 2 percent of the unit  
*Geomorphic component:* Swales and flats on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 4.1 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, September, November, December

*Deepest ponding:* 0.3 foot (April, May, June, October)

*Available water capacity to a depth of 60 inches:* 7.4 inches

*Content of organic matter in the upper 10 inches:* 6 percent

*Typical profile:*

Ap—0 to 12 inches; fine sandy loam

Bk—12 to 18 inches; sandy loam

2C1,2C2—18 to 39 inches; very gravelly coarse sand

3C3—39 to 80 inches; loam

### **Major Uses of the Map Unit**

- Cropland, pasture, hayland

## **I20A—Foxlake loam, 0 to 2 percent slopes**

### **Component Description**

#### **Foxlake and similar soils**

*Extent:* 75 percent of the unit

*Geomorphic component:* Flats and swales on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (April)

*Deepest depth to wet zone:* 3 feet (August)

*Months when ponding does not occur:* January, February, March, December

*Deepest ponding:* 0.3 foot (April, May, June, November)

*Available water capacity to a depth of 60 inches:* 8.9 inches

*Content of organic matter in the upper 10 inches:* 5 percent

*Typical profile:*

Ap,A—0 to 19 inches; loam

Bg—19 to 38 inches; silty clay

Bkg—38 to 49 inches; clay

Cg—49 to 80 inches; clay

#### **Clearwater**

*Extent:* 5 percent of the unit

*Geomorphic component:* Swales and flats on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Clay

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (April)

*Deepest depth to wet zone:* 3 feet (August)

*Months when ponding does not occur:* January, February, March, December

*Deepest ponding:* 0.3 foot (April, May, June, November)

*Available water capacity to a depth of 60 inches:* 8.2 inches

*Content of organic matter in the upper 10 inches:* 4.2 percent

*Typical profile:*

Ap—0 to 8 inches; clay  
 Bss1,Bss2—8 to 35 inches; clay  
 Cg1,Cg2—35 to 80 inches; clay

**Foxlake, very cobbly**

*Extent:* 5 percent of the unit  
*Geomorphic component:* Flats and swales on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Till  
*Flooding:* None  
*Shallowest depth to wet zone:* At the surface (April)  
*Deepest depth to wet zone:* 3 feet (August)  
*Months when ponding does not occur:* January, February, March, December  
*Deepest ponding:* 0.3 foot (April, May, June, November)  
*Available water capacity to a depth of 60 inches:* 8.9 inches  
*Content of organic matter in the upper 10 inches:* 5 percent

*Typical profile:*

Ap,A—0 to 19 inches; loam  
 Bg—19 to 38 inches; silty clay  
 Bkg—38 to 49 inches; clay  
 Cg—49 to 80 inches; clay

**Augsburg**

*Extent:* 3 percent of the unit  
*Geomorphic component:* Flats and swales on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 3.8 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, December  
*Deepest ponding:* 0.3 foot (April, May, June, September, October, November)  
*Available water capacity to a depth of 60 inches:* 10 inches  
*Content of organic matter in the upper 10 inches:* 5 percent

*Typical profile:*

Ap,A—0 to 11 inches; loam  
 Bkg—11 to 18 inches; very fine sandy loam  
 Bg1—18 to 33 inches; loamy very fine sand  
 2Bg2—33 to 60 inches; clay

**Clearwater, depressional**

*Extent:* 3 percent of the unit  
*Geomorphic component:* Depressions on lake plains  
*Slope range:* 0 to 1 percent  
*Texture of the surface layer:* Mucky clay loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Very poorly drained  
*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May)

*Deepest depth to wet zone:* 1.6 feet (February, August)

*Ponding depth:* 0.5 foot (all year)

*Available water capacity to a depth of 60 inches:* 9 inches

*Content of organic matter in the upper 10 inches:* 8.4 percent

*Typical profile:*

Ap—0 to 8 inches; mucky clay loam

Bss1,Bss2—8 to 35 inches; clay

Cg1,Cg2—35 to 80 inches; clay

### **Espelie**

*Extent:* 3 percent of the unit

*Geomorphic component:* Flats and swales on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 3.8 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, December

*Deepest ponding:* 0.3 foot (April, May, June)

*Available water capacity to a depth of 60 inches:* 7.1 inches

*Content of organic matter in the upper 10 inches:* 5.6 percent

*Typical profile:*

Ap—0 to 9 inches; fine sandy loam

Bw1,Bw2—9 to 24 inches; fine sand

2Bg-2Cg—24 to 80 inches; clay

### **Hilaire**

*Extent:* 2 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Moderately well drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 2.5 feet (April)

*Deepest depth to wet zone:* 6.7 feet (transitory) (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 6.4 inches

*Content of organic matter in the upper 10 inches:* 3 percent

*Typical profile:*

Ap,A—0 to 10 inches; fine sandy loam

Bw1-Bw4—10 to 34 inches; fine sand

2BCk—34 to 80 inches; clay

### **Reis**

*Extent:* 2 percent of the unit

*Geomorphic component:* Flats and rises on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Clay

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 3.6 feet (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 8.3 inches

*Content of organic matter in the upper 10 inches:* 4.7 percent

*Typical profile:*

Ap—0 to 9 inches; clay

A/Bk—9 to 17 inches; clay

Bkss1,Bkss2—17 to 33 inches; clay

Bkg—33 to 42 inches; clay

Cg1,Cg2—42 to 60 inches; clay

C—60 to 80 inches; clay

### **Wheatville**

*Extent:* 2 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Very fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Somewhat poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 1.3 feet (April)

*Deepest depth to wet zone:* 6.7 feet (transitory) (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 9.4 inches

*Content of organic matter in the upper 10 inches:* 2.8 percent

*Typical profile:*

Ap—0 to 9 inches; very fine sandy loam

Bk1,Bk2—9 to 31 inches; very fine sandy loam

2C1-2C4—31 to 80 inches; clay

### **Major Uses of the Map Unit**

- Cropland

## **I21A—Fram loam, 1 to 3 percent slopes**

### **Component Description**

#### **Fram and similar soils**

*Extent:* 85 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 1 to 3 percent

*Texture of the surface layer:* Loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Somewhat poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* 2.5 feet (April)

*Deepest depth to wet zone:* 6.7 feet (transitory) (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 10.5 inches

*Content of organic matter in the upper 10 inches:* 2.3 percent

*Typical profile:*

Ap—0 to 7 inches; loam

Bk,BCk—7 to 38 inches; loam

C—38 to 60 inches; loam

### **Hedman**

*Extent:* 12 percent of the unit

*Geomorphic component:* Swales and flats on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 3.8 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, December

*Deepest ponding:* 0.3 foot (April, May, June, September, October, November)

*Available water capacity to a depth of 60 inches:* 10.6 inches

*Content of organic matter in the upper 10 inches:* 5 percent

*Typical profile:*

Ap,A—0 to 11 inches; loam

Bkg—11 to 20 inches; fine sandy loam

Cg1-Cg4—20 to 80 inches; loam

### **Strathcona**

*Extent:* 2 percent of the unit

*Geomorphic component:* Flats and swales on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 4.1 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, September, December

*Deepest ponding:* 0.3 foot (April, May)

*Available water capacity to a depth of 60 inches:* 9 inches

*Content of organic matter in the upper 10 inches:* 6 percent

*Typical profile:*

Ap—0 to 10 inches; fine sandy loam

Bkg—10 to 17 inches; fine sandy loam

Cg1—17 to 28 inches; fine sand

2Cg2,2Cg3—28 to 80 inches; loam

### **Foxhome**

*Extent:* 1 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Moderately well drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 2.5 feet (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 8.6 inches  
*Content of organic matter in the upper 10 inches:* 3 percent  
*Typical profile:*  
     Ap—0 to 10 inches; sandy loam  
     Bw1—10 to 15 inches; loamy sand  
     2Bw2—15 to 23 inches; very gravelly coarse sand  
     3C1-3C3—23 to 80 inches; loam

### Major Uses of the Map Unit

- Cropland, pasture, hayland

## I22A—Glyndon loam, 0 to 2 percent slopes

### Component Description

#### Glyndon and similar soils

*Extent:* 75 percent of the unit  
*Geomorphic component:* Rises on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Somewhat poorly drained  
*Parent material:* Glaciolacustrine deposits  
*Flooding:* None  
*Shallowest depth to wet zone:* 1 foot (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 10.4 inches  
*Content of organic matter in the upper 10 inches:* 3 percent  
*Typical profile:*  
     Ap,A—0 to 11 inches; loam  
     Bk1,Bk2—11 to 28 inches; loam  
     C,Cg—28 to 60 inches; loamy very fine sand

#### Borup

*Extent:* 10 percent of the unit  
*Geomorphic component:* Flats and swales on lake plains  
*Slope range:* 0 to 1 percent  
*Texture of the surface layer:* Loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 3.8 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, December  
*Deepest ponding:* 0.3 foot (April, May, June)  
*Available water capacity to a depth of 60 inches:* 10.7 inches

*Content of organic matter in the upper 10 inches:* 5 percent

*Typical profile:*

- Ap,A—0 to 12 inches; loam
- Bkg,Bkyg—12 to 34 inches; silt loam
- Cg—34 to 60 inches; very fine sandy loam

### **Augsburg**

*Extent:* 5 percent of the unit

*Geomorphic component:* Flats and swales on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 3.8 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, December

*Deepest ponding:* 0.3 foot (April, May, June, September, October, November)

*Available water capacity to a depth of 60 inches:* 10 inches

*Content of organic matter in the upper 10 inches:* 5 percent

*Typical profile:*

- Ap,A—0 to 11 inches; loam
- Bkg—11 to 18 inches; very fine sandy loam
- Bg1—18 to 33 inches; very fine sandy loam
- 2Bg2—33 to 60 inches; clay

### **Ulen**

*Extent:* 5 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Moderately well drained

*Parent material:* Glaciolacustrine deposits

*Flooding:* None

*Shallowest depth to wet zone:* 2 feet (April)

*Deepest depth to wet zone:* More than 6.7 feet (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 5.8 inches

*Content of organic matter in the upper 10 inches:* 2.8 percent

*Typical profile:*

- Ap—0 to 9 inches; fine sandy loam
- Bk1,Bk2—9 to 42 inches; loamy fine sand
- C—42 to 60 inches; fine sand

### **Wheatville**

*Extent:* 3 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Very fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Somewhat poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 1.3 feet (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 9.4 inches  
*Content of organic matter in the upper 10 inches:* 2.8 percent  
*Typical profile:*  
     Ap—0 to 9 inches; very fine sandy loam  
     Bk1,Bk2—9 to 31 inches; very fine sandy loam  
     2C1-2C4—31 to 80 inches; clay

### **Flaming**

*Extent:* 2 percent of the unit  
*Geomorphic component:* Rises on lake plains  
*Slope range:* 0 to 3 percent  
*Texture of the surface layer:* Loamy fine sand  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Glaciolacustrine deposits  
*Flooding:* None  
*Shallowest depth to wet zone:* 2.5 feet (April)  
*Deepest depth to wet zone:* More than 6.7 feet (July, August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 4.9 inches  
*Content of organic matter in the upper 10 inches:* 3 percent  
*Typical profile:*  
     Ap,A—0 to 12 inches; loamy fine sand  
     BA—12 to 17 inches; fine sand  
     Bw—17 to 27 inches; fine sand  
     C1,C2—27 to 60 inches; fine sand

### **Major Uses of the Map Unit**

- Cropland

## **I23A—Glyndon very fine sandy loam, 0 to 2 percent slopes**

### **Component Description**

#### **Glyndon and similar soils**

*Extent:* 75 percent of the unit  
*Geomorphic component:* Rises on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Very fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Somewhat poorly drained  
*Parent material:* Glaciolacustrine deposits  
*Flooding:* None  
*Shallowest depth to wet zone:* 1 foot (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 10.4 inches  
*Content of organic matter in the upper 10 inches:* 3 percent

*Typical profile:*

Ap,Ak—0 to 11 inches; very fine sandy loam  
 Bk1,Bk2—11 to 28 inches; very fine sandy loam  
 C,Cg—28 to 60 inches; loamy very fine sand

**Borup**

*Extent:* 10 percent of the unit  
*Geomorphic component:* Flats and swales on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Very fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 3.8 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, December  
*Deepest ponding:* 0.3 foot (April, May, June)  
*Available water capacity to a depth of 60 inches:* 10.7 inches  
*Content of organic matter in the upper 10 inches:* 5 percent  
*Typical profile:*  
 Ap,A—0 to 12 inches; very fine sandy loam  
 Bkg,Bkyg—12 to 34 inches; silt loam  
 Cg—34 to 60 inches; very fine sandy loam

**Augsburg**

*Extent:* 5 percent of the unit  
*Geomorphic component:* Flats and swales on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 3.8 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, December  
*Deepest ponding:* 0.3 foot (April, May, June, September, October, November)  
*Available water capacity to a depth of 60 inches:* 10 inches  
*Content of organic matter in the upper 10 inches:* 5 percent  
*Typical profile:*  
 Ap,A—0 to 11 inches; loam  
 Bkg—11 to 18 inches; very fine sandy loam  
 Bg1—18 to 33 inches; loamy very fine sand  
 2Bg2—33 to 60 inches; clay

**Ulen**

*Extent:* 5 percent of the unit  
*Geomorphic component:* Rises on lake plains  
*Slope range:* 0 to 3 percent  
*Texture of the surface layer:* Loamy fine sand  
*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Somewhat poorly drained  
*Parent material:* Glaciolacustrine deposits  
*Flooding:* None  
*Shallowest depth to wet zone:* 2 feet (April)  
*Deepest depth to wet zone:* More than 6.7 feet (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 5.4 inches  
*Content of organic matter in the upper 10 inches:* 2.8 percent  
*Typical profile:*  
     Ap—0 to 9 inches; loamy fine sand  
     Bk1,Bk2—9 to 42 inches; loamy fine sand  
     C—42 to 60 inches; fine sand

### **Wheatville**

*Extent:* 3 percent of the unit  
*Geomorphic component:* Rises on lake plains  
*Slope range:* 0 to 3 percent  
*Texture of the surface layer:* Very fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Somewhat poorly drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 1.3 feet (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 9.4 inches  
*Content of organic matter in the upper 10 inches:* 2.8 percent  
*Typical profile:*  
     Ap—0 to 9 inches; very fine sandy loam  
     Bk1,Bk2—9 to 31 inches; very fine sandy loam  
     2C1-2C4—31 to 80 inches; clay

### **Flaming**

*Extent:* 2 percent of the unit  
*Geomorphic component:* Rises on lake plains  
*Slope range:* 0 to 3 percent  
*Texture of the surface layer:* Loamy fine sand  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Glaciolacustrine deposits  
*Flooding:* None  
*Shallowest depth to wet zone:* 2.5 feet (April)  
*Deepest depth to wet zone:* More than 6.7 feet (July, August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 4.9 inches  
*Content of organic matter in the upper 10 inches:* 3 percent  
*Typical profile:*  
     Ap,A—0 to 12 inches; loamy fine sand  
     BA—12 to 17 inches; fine sand  
     Bw—17 to 27 inches; fine sand  
     C1,C2—27 to 60 inches; fine sand

### **Major Uses of the Map Unit**

- Cropland

## I24A—Grimstad fine sandy loam, 0 to 3 percent slopes

### Component Description

#### **Grimstad and similar soils**

*Extent:* 70 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Somewhat poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 1.5 feet (April)

*Deepest depth to wet zone:* More than 6.7 feet (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 9.2 inches

*Content of organic matter in the upper 10 inches:* 2.8 percent

*Typical profile:*

Ap—0 to 9 inches; fine sandy loam

Bk1,Bk2—9 to 22 inches; loamy fine sand

C1—22 to 28 inches; fine sand

2C2,2C3—28 to 60 inches; loam

#### **Strathcona**

*Extent:* 12 percent of the unit

*Geomorphic component:* Swales and flats on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 4.1 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, September, December

*Deepest ponding:* 0.3 foot (April, May)

*Available water capacity to a depth of 60 inches:* 9 inches

*Content of organic matter in the upper 10 inches:* 6 percent

*Typical profile:*

Ap—0 to 10 inches; fine sandy loam

Bkg—10 to 17 inches; fine sandy loam

Cg1—17 to 28 inches; fine sand

2Cg2,2Cg3—28 to 80 inches; loam

#### **Foldahl**

*Extent:* 5 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Moderately well drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 2.5 feet (April)

*Deepest depth to wet zone:* 6.7 feet (transitory) (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 8.8 inches

*Content of organic matter in the upper 10 inches:* 3 percent

*Typical profile:*

Ap,A—0 to 12 inches; fine sandy loam

Bw1,Bw2—12 to 30 inches; fine sand

2BCk-2C3—30 to 80 inches; loam

### **Hamerly**

*Extent:* 5 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Somewhat poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* 1.3 feet (April)

*Deepest depth to wet zone:* 6.7 feet (transitory) (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 10.5 inches

*Content of organic matter in the upper 10 inches:* 2.5 percent

*Typical profile:*

Ap—0 to 8 inches; loam

Bk1,Bk2—8 to 25 inches; loam

C—25 to 60 inches; loam

### **Foxhome**

*Extent:* 2 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Moderately well drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 2.5 feet (April)

*Deepest depth to wet zone:* 6.7 feet (transitory) (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 8.6 inches

*Content of organic matter in the upper 10 inches:* 3 percent

*Typical profile:*

Ap—0 to 10 inches; sandy loam

Bw1—10 to 15 inches; sand

2Bw2—15 to 23 inches; very gravelly coarse sand

3C1-3C3—23 to 80 inches; loam

### **Karlsruhe**

*Extent:* 2 percent of the unit

*Geomorphic component:* Rises on beach plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Somewhat poorly drained

*Parent material:* Beach deposits

*Flooding:* None

*Shallowest depth to wet zone:* 2 feet (April)

*Deepest depth to wet zone:* 6.7 feet (transitory) (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 5.2 inches

*Content of organic matter in the upper 10 inches:* 4 percent

*Typical profile:*

A, Ak, ABk—0 to 15 inches; sandy loam

Bk, BCk—15 to 30 inches; loamy sand

C1, C2—30 to 60 inches; coarse sand

### **Mavie**

*Extent:* 2 percent of the unit

*Geomorphic component:* Flats and swales on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 4.1 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, September, November, December

*Deepest ponding:* 0.3 foot (April, May, June, October)

*Available water capacity to a depth of 60 inches:* 7.4 inches

*Content of organic matter in the upper 10 inches:* 6 percent

*Typical profile:*

Ap—0 to 12 inches; fine sandy loam

Bk—12 to 18 inches; sandy loam

2C1, 2C2—18 to 39 inches; very gravelly coarse sand

3C3—39 to 80 inches; loam

### **Ulen**

*Extent:* 2 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Moderately well drained

*Parent material:* Glaciolacustrine deposits

*Flooding:* None

*Shallowest depth to wet zone:* 2 feet (April)

*Deepest depth to wet zone:* More than 6.7 feet (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 5.8 inches

*Content of organic matter in the upper 10 inches:* 2.8 percent

*Typical profile:*

Ap—0 to 9 inches; fine sandy loam

Bk1, Bk2—9 to 42 inches; loamy fine sand

C—42 to 60 inches; fine sand

### Major Uses of the Map Unit

- Cropland, pasture, hayland

## I25A—Hamar loamy fine sand, 0 to 2 percent slopes

### Component Description

#### Hamar and similar soils

*Extent:* 75 percent of the unit

*Geomorphic component:* Swales and flats on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Loamy fine sand

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 4.9 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, September, November, December

*Deepest ponding:* 0.3 foot (April, May, June, October)

*Available water capacity to a depth of 60 inches:* 5 inches

*Content of organic matter in the upper 10 inches:* 6 percent

*Typical profile:*

A1,A2—0 to 12 inches; loamy fine sand

AC—12 to 17 inches; loamy fine sand

C1,C2—17 to 40 inches; fine sand

Ab—40 to 47 inches; loamy fine sand

Cg—47 to 60 inches; fine sand

#### Garborg

*Extent:* 10 percent of the unit

*Geomorphic component:* Rises and flats on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Loamy fine sand

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Somewhat poorly drained

*Parent material:* Glaciolacustrine deposits

*Flooding:* None

*Shallowest depth to wet zone:* 1.5 feet (April)

*Deepest depth to wet zone:* More than 6.7 feet (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 5.2 inches

*Content of organic matter in the upper 10 inches:* 4 percent

*Typical profile:*

Ap,A—0 to 12 inches; loamy fine sand

Bw1-Bw3—12 to 41 inches; loamy fine sand

BCK—41 to 59 inches; fine sand

C1,C2—59 to 80 inches; fine sand

#### Rosewood

*Extent:* 7 percent of the unit

*Geomorphic component:* Flats and swales on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 4.9 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, September, November, December  
*Deepest ponding:* 0.3 foot (April, May, June, October)  
*Available water capacity to a depth of 60 inches:* 5.6 inches  
*Content of organic matter in the upper 10 inches:* 5 percent  
*Typical profile:*  
     Ap—0 to 8 inches; fine sandy loam  
     Bkg1,Bkg2—8 to 18 inches; fine sandy loam  
     Cg1-Cg3—18 to 80 inches; fine sand

### **Venlo**

*Extent:* 3 percent of the unit  
*Geomorphic component:* Depressions on lake plains  
*Slope range:* 0 to 1 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Very poorly drained  
*Parent material:* Glaciolacustrine deposits  
*Flooding:* None  
*Shallowest depth to wet zone:* At the surface (April)  
*Deepest depth to wet zone:* 3 feet (February, August)  
*Shallowest ponding:* 0.3 foot (July, August, September, October)  
*Deepest ponding:* 0.5 foot (January, February, March, April, May, June, November, December)  
*Available water capacity to a depth of 60 inches:* 5.4 inches  
*Content of organic matter in the upper 10 inches:* 10 percent  
*Typical profile:*  
     A—0 to 13 inches; fine sandy loam  
     Cg1,Cg2—13 to 60 inches; fine sand

### **Flaming**

*Extent:* 2 percent of the unit  
*Geomorphic component:* Rises on lake plains  
*Slope range:* 0 to 3 percent  
*Texture of the surface layer:* Loamy fine sand  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Glaciolacustrine deposits  
*Flooding:* None  
*Shallowest depth to wet zone:* 2.5 feet (April)  
*Deepest depth to wet zone:* More than 6.7 feet (July, August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 4.9 inches  
*Content of organic matter in the upper 10 inches:* 3 percent  
*Typical profile:*  
     Ap,A—0 to 12 inches; loamy fine sand  
     BA—12 to 17 inches; fine sand  
     Bw—17 to 27 inches; fine sand  
     C1,C2—27 to 60 inches; fine sand

**Hangaard**

*Extent:* 2 percent of the unit

*Geomorphic component:* Flats and swales on beach plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Beach deposits

*Flooding:* None

*Shallowest depth to wet zone:* 0.3 foot (April)

*Deepest depth to wet zone:* 3.3 feet (February, August)

*Months when ponding does not occur:* January, February, March, July, August, September, October, November, December

*Deepest ponding:* 0.3 foot (April, May)

*Available water capacity to a depth of 60 inches:* 3 inches

*Content of organic matter in the upper 10 inches:* 6 percent

*Typical profile:*

Ap—0 to 10 inches; sandy loam

A—10 to 15 inches; loamy sand

Cg1-Cg5—15 to 80 inches; coarse sand

**Kratka**

*Extent:* 1 percent of the unit

*Geomorphic component:* Flats and swales on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 4.1 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, September, December

*Deepest ponding:* 0.3 foot (April, May)

*Available water capacity to a depth of 60 inches:* 9.1 inches

*Content of organic matter in the upper 10 inches:* 6 percent

*Typical profile:*

Ap,A—0 to 11 inches; fine sandy loam

Bg1,Bg2—11 to 18 inches; loamy fine sand

Cg1—18 to 25 inches; fine sand

2Cg2-2Cg4—25 to 80 inches; loam

**Major Uses of the Map Unit**

- Cropland, pasture, hayland

**I26A—Hamerly loam, 0 to 2 percent slopes****Component Description****Hamerly and similar soils**

*Extent:* 75 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Somewhat poorly drained  
*Parent material:* Till  
*Flooding:* None  
*Shallowest depth to wet zone:* 1.3 feet (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 10.5 inches  
*Content of organic matter in the upper 10 inches:* 2.5 percent  
*Typical profile:*  
     Ap—0 to 8 inches; loam  
     Bk1,Bk2—8 to 25 inches; loam  
     C—25 to 60 inches; loam

### **Vallers**

*Extent:* 12 percent of the unit  
*Geomorphic component:* Flats and swales on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 3.8 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, December  
*Deepest ponding:* 0.3 foot (April, May, June, September, October, November)  
*Available water capacity to a depth of 60 inches:* 10.6 inches  
*Content of organic matter in the upper 10 inches:* 5 percent  
*Typical profile:*  
     A1,A2—0 to 12 inches; loam  
     Bkg1,Bkg2—12 to 21 inches; loam  
     Cg1,Cg2—21 to 60 inches; loam

### **Foxhome**

*Extent:* 3 percent of the unit  
*Geomorphic component:* Rises on lake plains  
*Slope range:* 0 to 3 percent  
*Texture of the surface layer:* Sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 2.5 feet (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 8.6 inches  
*Content of organic matter in the upper 10 inches:* 3 percent  
*Typical profile:*  
     Ap—0 to 10 inches; sandy loam  
     Bw1—10 to 15 inches; sand  
     2Bw2—15 to 23 inches; very gravelly coarse sand  
     3C1-3C3—23 to 80 inches; loam

**Grimstad**

*Extent:* 3 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Somewhat poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 1.5 feet (April)

*Deepest depth to wet zone:* More than 6.7 feet (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 9.2 inches

*Content of organic matter in the upper 10 inches:* 2.8 percent

*Typical profile:*

Ap—0 to 9 inches; fine sandy loam

Bk1,Bk2—9 to 22 inches; loamy fine sand

C1—22 to 28 inches; fine sand

2C2,2C3—28 to 60 inches; loam

**Hamerly, very cobbly**

*Extent:* 3 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Somewhat poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* 1.3 feet (April)

*Deepest depth to wet zone:* 6.7 feet (transitory) (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 10.5 inches

*Content of organic matter in the upper 10 inches:* 2.5 percent

*Typical profile:*

Ap—0 to 8 inches; loam

Bk1,Bk2—8 to 25 inches; loam

C—25 to 60 inches; loam

**Strathcona**

*Extent:* 3 percent of the unit

*Geomorphic component:* Flats and swales on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 4.1 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, September, December

*Deepest ponding:* 0.3 foot (April, May)

*Available water capacity to a depth of 60 inches:* 9 inches

*Content of organic matter in the upper 10 inches:* 6 percent

*Typical profile:*

Ap—0 to 10 inches; fine sandy loam  
 Bkg—10 to 17 inches; fine sandy loam  
 Cg1—17 to 28 inches; fine sand  
 2Cg2,2Cg3—28 to 80 inches; loam

**Roliss, depressional**

*Extent:* 1 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May)

*Deepest depth to wet zone:* 2.5 feet (February)

*Shallowest ponding:* 0.3 foot (July, August, September, October)

*Deepest ponding:* 0.5 foot (January, February, March, April, May, June, November, December)

*Available water capacity to a depth of 60 inches:* 10.9 inches

*Content of organic matter in the upper 10 inches:* 10 percent

*Typical profile:*

Ap,A—0 to 14 inches; loam  
 Bg—14 to 20 inches; loam  
 Cg1-Cg4—20 to 80 inches; loam

**Major Uses of the Map Unit**

- Cropland, pasture, hayland

**I27A—Hamre muck, 0 to 1 percent slopes****Component Description****Hamre and similar soils**

*Extent:* 80 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Muck

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May)

*Deepest depth to wet zone:* 2.5 feet (February)

*Shallowest ponding:* 0.3 foot (July, August, September)

*Deepest ponding:* 0.5 foot (January, February, March, April, May, June, October, November, December)

*Available water capacity to a depth of 60 inches:* 13.3 inches

*Content of organic matter in the upper 10 inches:* 85 percent

*Typical profile:*

Oa—0 to 13 inches; muck  
 A—13 to 18 inches; loam  
 Bg1,Bg2—18 to 71 inches; loam  
 Cg—71 to 80 inches; loam

**Northwood**

*Extent:* 5 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Muck

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Organic material over glaciolacustrine deposits and/or till

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May)

*Deepest depth to wet zone:* 2.5 feet (February)

*Shallowest ponding:* 0.3 foot (July, August, September)

*Deepest ponding:* 0.5 foot (January, February, March, April, May, June, October, November, December)

*Available water capacity to a depth of 60 inches:* 11.3 inches

*Content of organic matter in the upper 10 inches:* 78.6 percent

*Typical profile:*

Oa—0 to 9 inches; muck

A—9 to 14 inches; loamy fine sand

Bg1, Bg2—14 to 24 inches; fine sand

2BCkg-2Cg—24 to 80 inches; loam

**Roliss**

*Extent:* 5 percent of the unit

*Geomorphic component:* Swales and flats on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 3.8 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, December

*Deepest ponding:* 0.3 foot (April, May, June, September, October, November)

*Available water capacity to a depth of 60 inches:* 10.7 inches

*Content of organic matter in the upper 10 inches:* 5 percent

*Typical profile:*

Ap, A—0 to 14 inches; loam

Bg—14 to 20 inches; loam

Cg1-Cg4—20 to 80 inches; loam

**Smiley**

*Extent:* 5 percent of the unit

*Geomorphic component:* Flats and swales on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 3.8 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, December

*Deepest ponding:* 0.3 foot (April, May, June, September, October, November)

*Available water capacity to a depth of 60 inches:* 10.8 inches

*Content of organic matter in the upper 10 inches:* 5 percent

*Typical profile:*

Ap—0 to 12 inches; loam

Btg—12 to 19 inches; clay loam

Bkg1-Bkg3—19 to 42 inches; loam

Cg1,Cg2—42 to 80 inches; loam

### **Cathro**

*Extent:* 3 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Muck

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Organic material over till

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May, June)

*Deepest depth to wet zone:* 2.1 feet (February)

*Shallowest ponding:* 0.3 foot (January, February, July, August, September, October, November, December)

*Deepest ponding:* 0.5 foot (March, April, May, June)

*Available water capacity to a depth of 60 inches:* 15.9 inches

*Content of organic matter in the upper 10 inches:* 85 percent

*Typical profile:*

Oa1,Oa2—0 to 11 inches; muck

Oa3—11 to 23 inches; muck

Cg—23 to 60 inches; loam

### **Kratka**

*Extent:* 2 percent of the unit

*Geomorphic component:* Flats and swales on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 4.1 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, September, December

*Deepest ponding:* 0.3 foot (April, May)

*Available water capacity to a depth of 60 inches:* 9.1 inches

*Content of organic matter in the upper 10 inches:* 6 percent

*Typical profile:*

Ap,A—0 to 11 inches; fine sandy loam

Bg1,Bg2—11 to 18 inches; loamy fine sand

Cg1—18 to 25 inches; fine sand

2Cg2-2Cg4—25 to 80 inches; loam

### Major Uses of the Map Unit

- Pasture, hayland, wildlife habitat

## I28A—Hangaard sandy loam, 0 to 2 percent slopes

### Component Description

#### Hangaard and similar soils

*Extent:* 75 percent of the unit

*Geomorphic component:* Flats and swales on beach plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Beach deposits

*Flooding:* None

*Shallowest depth to wet zone:* 0.3 foot (April)

*Deepest depth to wet zone:* 3.3 feet (February, August)

*Months when ponding does not occur:* January, February, March, July, August, September, October, November, December

*Deepest ponding:* 0.3 foot (April, May)

*Available water capacity to a depth of 60 inches:* 3 inches

*Content of organic matter in the upper 10 inches:* 6 percent

*Typical profile:*

Ap—0 to 10 inches; sandy loam

A—10 to 15 inches; loamy sand

Cg1-Cg5—15 to 80 inches; coarse sand

#### Hamar

*Extent:* 7 percent of the unit

*Geomorphic component:* Flats and swales on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Loamy fine sand

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 4.9 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, September, November, December

*Deepest ponding:* 0.3 foot (April, May, June, October)

*Available water capacity to a depth of 60 inches:* 5 inches

*Content of organic matter in the upper 10 inches:* 6 percent

*Typical profile:*

A1,A2—0 to 12 inches; loamy fine sand

AC—12 to 17 inches; loamy fine sand

C1,C2—17 to 40 inches; fine sand

Ab—40 to 47 inches; loamy fine sand

Cg—47 to 60 inches; fine sand

#### Syrene

*Extent:* 7 percent of the unit

*Geomorphic component:* Swales and flats on beach plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Beach deposits  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.3 foot (April)  
*Deepest depth to wet zone:* 3.3 feet (February, August)  
*Months when ponding does not occur:* January, February, March, July, August, September, October, November, December  
*Deepest ponding:* 0.3 foot (April, May)  
*Available water capacity to a depth of 60 inches:* 3.8 inches  
*Content of organic matter in the upper 10 inches:* 5.6 percent  
*Typical profile:*  
     Ap—0 to 9 inches; sandy loam  
     Bkg1—9 to 17 inches; sandy loam  
     2Bkg2—17 to 27 inches; stratified loamy fine sand to gravelly coarse sand  
     2Cg—27 to 60 inches; stratified loamy fine sand to gravelly coarse sand

### **Karlsruhe**

*Extent:* 3 percent of the unit  
*Geomorphic component:* Rises on beach plains  
*Slope range:* 0 to 3 percent  
*Texture of the surface layer:* Sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Somewhat poorly drained  
*Parent material:* Beach deposits  
*Flooding:* None  
*Shallowest depth to wet zone:* 2 feet (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 5.2 inches  
*Content of organic matter in the upper 10 inches:* 4 percent  
*Typical profile:*  
     A,Ak,ABk—0 to 15 inches; sandy loam  
     Bk,BCk—15 to 30 inches; loamy sand  
     C1,C2—30 to 60 inches; coarse sand

### **Rosewood**

*Extent:* 3 percent of the unit  
*Geomorphic component:* Swales and flats on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 4.9 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, September, November, December  
*Deepest ponding:* 0.3 foot (April, May, June, October)  
*Available water capacity to a depth of 60 inches:* 5.6 inches  
*Content of organic matter in the upper 10 inches:* 5 percent  
*Typical profile:*  
     Ap—0 to 8 inches; fine sandy loam

Bkg1,Bkg2—8 to 18 inches; fine sandy loam

Cg1-Cg3—18 to 80 inches; fine sand

### **Strandquist**

*Extent:* 3 percent of the unit

*Geomorphic component:* Swales and flats on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 4.1 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, September, November, December

*Deepest ponding:* 0.3 foot (April, May, June, October)

*Available water capacity to a depth of 60 inches:* 9.3 inches

*Content of organic matter in the upper 10 inches:* 6 percent

*Typical profile:*

Ap—0 to 10 inches; loam

2Bg1—10 to 20 inches; very gravelly sand

3Bg2,3Cg—20 to 60 inches; loam

### **Deerwood**

*Extent:* 2 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Muck

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Organic material over glaciolacustrine deposits

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May)

*Deepest depth to wet zone:* 2.5 feet (February)

*Shallowest ponding:* 0.3 foot (July, August, September)

*Deepest ponding:* 0.5 foot (January, February, March, April, May, June, October, November, December)

*Available water capacity to a depth of 60 inches:* 7.1 inches

*Content of organic matter in the upper 10 inches:* 75 percent

*Typical profile:*

Oa—0 to 10 inches; muck

A—10 to 12 inches; loamy sand

Cg1,Cg2—12 to 60 inches; sand

### **Major Uses of the Map Unit**

- Cropland, pasture, hayland

## **I29A—Hattie clay, 0 to 3 percent slopes**

### **Component Description**

#### **Hattie and similar soils**

*Extent:* 75 percent of the unit

*Geomorphic component:* Escarpments on lake plains

*Position on the landform:* Summits

*Slope range:* 1 to 3 percent

*Texture of the surface layer:* Clay

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Moderately well drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* 2.1 feet (April)

*Deepest depth to wet zone:* 6.7 feet (transitory) (February)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 7.7 inches

*Content of organic matter in the upper 10 inches:* 2.5 percent

*Typical profile:*

Ap—0 to 8 inches; clay

Bk—8 to 22 inches; silty clay

C—22 to 80 inches; clay

### **Clearwater**

*Extent:* 12 percent of the unit

*Geomorphic component:* Flats and swales on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Clay

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (April)

*Deepest depth to wet zone:* 3 feet (August)

*Months when ponding does not occur:* January, February, March, December

*Deepest ponding:* 0.3 foot (April, May, June, November)

*Available water capacity to a depth of 60 inches:* 8.2 inches

*Content of organic matter in the upper 10 inches:* 4.2 percent

*Typical profile:*

Ap—0 to 8 inches; clay

Bss1,Bss2—8 to 35 inches; clay

Cg1,Cg2—35 to 80 inches; clay

### **Reis**

*Extent:* 6 percent of the unit

*Geomorphic component:* Flats and rises on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Clay

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 3.6 feet (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 8.3 inches

*Content of organic matter in the upper 10 inches:* 4.7 percent

*Typical profile:*

Ap—0 to 9 inches; clay

A/Bk—9 to 17 inches; clay

Bkss1,Bkss2—17 to 33 inches; clay

Bkg—33 to 42 inches; clay  
 Cg1,Cg2—42 to 60 inches; clay  
 C—60 to 80 inches; clay

### **Hattie, very cobbly**

*Extent:* 5 percent of the unit  
*Geomorphic component:* Escarpments on lake plains  
*Position on the landform:* Summits  
*Slope range:* 1 to 3 percent  
*Texture of the surface layer:* Clay  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Till  
*Flooding:* None  
*Shallowest depth to wet zone:* 2.1 feet (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (February)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 7.7 inches  
*Content of organic matter in the upper 10 inches:* 2.5 percent  
*Typical profile:*  
 Ap—0 to 8 inches; clay  
 Bk—8 to 22 inches; silty clay  
 C—22 to 80 inches; clay

### **Hilaire**

*Extent:* 2 percent of the unit  
*Geomorphic component:* Rises on lake plains  
*Slope range:* 0 to 3 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 2.5 feet (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 6.9 inches  
*Content of organic matter in the upper 10 inches:* 3 percent  
*Typical profile:*  
 Ap,A—0 to 10 inches; fine sandy loam  
 Bw1-Bw4—10 to 34 inches; fine sand  
 2Bck—34 to 80 inches; clay

### **Major Uses of the Map Unit**

- Cropland, pasture, hayland

## **I29D—Hattie clay, 6 to 18 percent slopes**

### **Component Description**

#### **Hattie and similar soils**

*Extent:* 85 percent of the unit  
*Geomorphic component:* Escarpments on lake plains  
*Position on the landform:* Shoulders and backslopes  
*Slope range:* 6 to 18 percent

*Texture of the surface layer:* Clay  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Till  
*Flooding:* None  
*Shallowest depth to wet zone:* 2.1 feet (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (February)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 7.7 inches  
*Content of organic matter in the upper 10 inches:* 2.5 percent  
*Typical profile:*  
     Ap—0 to 8 inches; clay  
     Bk—8 to 22 inches; silty clay  
     C—22 to 80 inches; clay

### **Clearwater**

*Extent:* 6 percent of the unit  
*Geomorphic component:* Flats and swales on lake plains  
*Slope range:* 0 to 1 percent  
*Texture of the surface layer:* Clay  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Till  
*Flooding:* None  
*Shallowest depth to wet zone:* At the surface (April)  
*Deepest depth to wet zone:* 3 feet (August)  
*Months when ponding does not occur:* January, February, March, December  
*Deepest ponding:* 0.3 foot (April, May, June, November)  
*Available water capacity to a depth of 60 inches:* 8.2 inches  
*Content of organic matter in the upper 10 inches:* 4.2 percent  
*Typical profile:*  
     Ap—0 to 8 inches; clay  
     Bss1,Bss2—8 to 35 inches; clay  
     Cg1,Cg2—35 to 80 inches; clay

### **Hattie, level**

*Extent:* 5 percent of the unit  
*Geomorphic component:* Escarpments on lake plains  
*Position on the landform:* Summits  
*Slope range:* 1 to 3 percent  
*Texture of the surface layer:* Clay  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Till  
*Flooding:* None  
*Shallowest depth to wet zone:* 2.1 feet (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (February)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 7.7 inches  
*Content of organic matter in the upper 10 inches:* 2.5 percent  
*Typical profile:*  
     Ap—0 to 8 inches; clay  
     Bk—8 to 22 inches; silty clay  
     C—22 to 80 inches; clay

**Boyerlake**

*Extent:* 4 percent of the unit

*Geomorphic component:* Escarpments on lake plains

*Position on the landform:* Backslopes and shoulders

*Slope range:* 3 to 6 percent

*Texture of the surface layer:* Silty clay

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Moderately well drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* 2.1 feet (April)

*Deepest depth to wet zone:* 6.7 feet (transitory) (February)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 7.8 inches

*Content of organic matter in the upper 10 inches:* 1.6 percent

*Typical profile:*

Ap—0 to 7 inches; silty clay

Bk1,Bk2—7 to 37 inches; silty clay

C—37 to 80 inches; clay

**Major Uses of the Map Unit**

- Pasture, hayland, wildlife habitat

**I30A—Hedman loam, 0 to 2 percent slopes****Component Description****Hedman and similar soils**

*Extent:* 85 percent of the unit

*Geomorphic component:* Flats and swales on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 3.8 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, December

*Deepest ponding:* 0.3 foot (April, May, June, September, October, November)

*Available water capacity to a depth of 60 inches:* 10.6 inches

*Content of organic matter in the upper 10 inches:* 5 percent

*Typical profile:*

Ap,A—0 to 11 inches; loam

Bkg—11 to 20 inches; fine sandy loam

Cg1-Cg4—20 to 80 inches; loam

**Fram**

*Extent:* 5 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 1 to 3 percent

*Texture of the surface layer:* Loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Somewhat poorly drained  
*Parent material:* Till  
*Flooding:* None  
*Shallowest depth to wet zone:* 2.5 feet (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 10.5 inches  
*Content of organic matter in the upper 10 inches:* 2.3 percent  
*Typical profile:*  
 Ap—0 to 7 inches; loam  
 Bk,Bc—7 to 38 inches; loam  
 C—38 to 60 inches; loam

### **Strathcona**

*Extent:* 5 percent of the unit  
*Geomorphic component:* Swales and flats on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 4.1 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, September, December  
*Deepest ponding:* 0.3 foot (April, May)  
*Available water capacity to a depth of 60 inches:* 9 inches  
*Content of organic matter in the upper 10 inches:* 6 percent  
*Typical profile:*  
 Ap—0 to 10 inches; fine sandy loam  
 Bkg—10 to 17 inches; fine sandy loam  
 Cg1—17 to 28 inches; fine sand  
 2Cg2,2Cg3—28 to 80 inches; loam

### **Haug**

*Extent:* 3 percent of the unit  
*Geomorphic component:* Depressions on lake plains  
*Slope range:* 0 to 1 percent  
*Texture of the surface layer:* Muck  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Very poorly drained  
*Parent material:* Organic material over till  
*Flooding:* None  
*Shallowest depth to wet zone:* At the surface (March, April, May)  
*Deepest depth to wet zone:* 2.5 feet (February)  
*Shallowest ponding:* 0.3 foot (July, August, September)  
*Deepest ponding:* 0.5 foot (January, February, March, April, May, June, October, November, December)  
*Available water capacity to a depth of 60 inches:* 12.7 inches  
*Content of organic matter in the upper 10 inches:* 70 percent  
*Typical profile:*  
 Oa—0 to 10 inches; muck  
 A—10 to 14 inches; mucky sandy loam  
 Bg1,Bg2—14 to 60 inches; loam

**Strandquist**

*Extent:* 2 percent of the unit

*Geomorphic component:* Swales and flats on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 4.1 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, September, November, December

*Deepest ponding:* 0.3 foot (April, May, June, October)

*Available water capacity to a depth of 60 inches:* 9.3 inches

*Content of organic matter in the upper 10 inches:* 6 percent

*Typical profile:*

Ap—0 to 10 inches; loam

2Bg1—10 to 20 inches; very gravelly sand

3Bg2,3Cg—20 to 60 inches; loam

**Major Uses of the Map Unit**

- Cropland, pasture, hayland

**I31A—Hedman-Fram complex, 0 to 3 percent slopes****Component Description****Hedman and similar soils**

*Extent:* 50 percent of the unit

*Geomorphic component:* Flats and swales on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 3.8 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, December

*Deepest ponding:* 0.3 foot (April, May, June, September, October, November)

*Available water capacity to a depth of 60 inches:* 10.6 inches

*Content of organic matter in the upper 10 inches:* 5 percent

*Typical profile:*

Ap,A—0 to 11 inches; loam

Bkg—11 to 20 inches; fine sandy loam

Cg1-Cg4—20 to 80 inches; loam

**Fram and similar soils**

*Extent:* 40 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 1 to 3 percent

*Texture of the surface layer:* Loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Somewhat poorly drained  
*Parent material:* Till  
*Flooding:* None  
*Shallowest depth to wet zone:* 2.5 feet (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 10.5 inches  
*Content of organic matter in the upper 10 inches:* 2.3 percent  
*Typical profile:*  
 Ap—0 to 7 inches; loam  
 Bk,Bc—7 to 38 inches; loam  
 C—38 to 60 inches; loam

### **Strathcona**

*Extent:* 5 percent of the unit  
*Geomorphic component:* Flats and swales on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 4.1 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, September, December  
*Deepest ponding:* 0.3 foot (April, May)  
*Available water capacity to a depth of 60 inches:* 9 inches  
*Content of organic matter in the upper 10 inches:* 6 percent  
*Typical profile:*  
 Ap—0 to 10 inches; fine sandy loam  
 Bkg—10 to 17 inches; fine sandy loam  
 Cg1—17 to 28 inches; fine sand  
 2Cg2,2Cg3—28 to 80 inches; loam

### **Haug**

*Extent:* 3 percent of the unit  
*Geomorphic component:* Depressions on lake plains  
*Slope range:* 0 to 1 percent  
*Texture of the surface layer:* Muck  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Very poorly drained  
*Parent material:* Organic material over till  
*Flooding:* None  
*Shallowest depth to wet zone:* At the surface (March, April, May)  
*Deepest depth to wet zone:* 2.5 feet (February)  
*Shallowest ponding:* 0.3 foot (July, August, September)  
*Deepest ponding:* 0.5 foot (January, February, March, April, May, June, October, November, December)  
*Available water capacity to a depth of 60 inches:* 12.7 inches  
*Content of organic matter in the upper 10 inches:* 70 percent  
*Typical profile:*  
 Oa—0 to 10 inches; muck  
 A—10 to 14 inches; mucky sandy loam  
 Bg1,Bg2—14 to 60 inches; loam

**Strandquist**

*Extent:* 2 percent of the unit

*Geomorphic component:* Swales and flats on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 4.1 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, September, November, December

*Deepest ponding:* 0.3 foot (April, May, June, October)

*Available water capacity to a depth of 60 inches:* 9.3 inches

*Content of organic matter in the upper 10 inches:* 6 percent

*Typical profile:*

Ap—0 to 10 inches; loam

2Bg1—10 to 20 inches; very gravelly sand

3Bg2,3Cg—20 to 60 inches; loam

**Major Uses of the Map Unit**

- Cropland, pasture, hayland

**I32A—Hilaire fine sandy loam, 0 to 3 percent slopes****Component Description****Hilaire and similar soils**

*Extent:* 75 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Moderately well drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 2.5 feet (April)

*Deepest depth to wet zone:* 6.7 feet (transitory) (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 6.9 inches

*Content of organic matter in the upper 10 inches:* 3 percent

*Typical profile:*

Ap,A—0 to 10 inches; fine sandy loam

Bw1-Bw4—10 to 34 inches; fine sand

2BCk—34 to 80 inches; clay

**Espelie**

*Extent:* 12 percent of the unit

*Geomorphic component:* Flats and swales on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits over till

**Flooding:** None*Shallowest depth to wet zone:* 0.5 foot (April)*Deepest depth to wet zone:* 3.8 feet (August)*Months when ponding does not occur:* January, February, March, July, August, December*Deepest ponding:* 0.3 foot (April, May, June)*Available water capacity to a depth of 60 inches:* 7.1 inches*Content of organic matter in the upper 10 inches:* 5.6 percent**Typical profile:**

Ap—0 to 9 inches; fine sandy loam

Bw1,Bw2—9 to 24 inches; fine sand

2Bg-2Cg—24 to 80 inches; clay

**Huot***Extent:* 5 percent of the unit*Geomorphic component:* Rises on lake plains*Slope range:* 0 to 3 percent*Texture of the surface layer:* Fine sandy loam*Depth to restrictive feature:* Very deep (more than 60 inches)*Drainage class:* Moderately well drained*Parent material:* Glaciolacustrine deposits over till**Flooding:** None*Shallowest depth to wet zone:* 2.5 feet (April)*Deepest depth to wet zone:* 6.7 feet (transitory) (August)**Ponding:** None*Available water capacity to a depth of 60 inches:* 7.6 inches*Content of organic matter in the upper 10 inches:* 3 percent**Typical profile:**

Ap,Ak—0 to 14 inches; fine sandy loam

Bk—14 to 26 inches; loamy fine sand

C1—26 to 34 inches; fine sand

2C2,2C3—34 to 80 inches; clay

**Flaming***Extent:* 2 percent of the unit*Geomorphic component:* Rises on lake plains*Slope range:* 0 to 3 percent*Texture of the surface layer:* Loamy fine sand*Depth to restrictive feature:* Very deep (more than 60 inches)*Drainage class:* Moderately well drained*Parent material:* Glaciolacustrine deposits**Flooding:** None*Shallowest depth to wet zone:* 2.5 feet (April)*Deepest depth to wet zone:* More than 6.7 feet (July, August)**Ponding:** None*Available water capacity to a depth of 60 inches:* 4.9 inches*Content of organic matter in the upper 10 inches:* 3 percent**Typical profile:**

Ap,A—0 to 12 inches; loamy fine sand

BA—12 to 17 inches; fine sand

Bw—17 to 27 inches; fine sand

C1,C2—27 to 60 inches; fine sand

**Foxlake***Extent:* 2 percent of the unit*Geomorphic component:* Flats and swales on lake plains

*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Till  
*Flooding:* None  
*Shallowest depth to wet zone:* At the surface (April)  
*Deepest depth to wet zone:* 3 feet (August)  
*Months when ponding does not occur:* January, February, March, December  
*Deepest ponding:* 0.3 foot (April, May, June, November)  
*Available water capacity to a depth of 60 inches:* 8.9 inches  
*Content of organic matter in the upper 10 inches:* 5 percent  
*Typical profile:*  
     Ap,A—0 to 19 inches; loam  
     Bg—19 to 38 inches; silty clay  
     Bkg—38 to 49 inches; clay  
     Cg—49 to 80 inches; clay

### **Wheatville**

*Extent:* 2 percent of the unit  
*Geomorphic component:* Rises on lake plains  
*Slope range:* 0 to 3 percent  
*Texture of the surface layer:* Very fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Somewhat poorly drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 1.3 feet (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 9.4 inches  
*Content of organic matter in the upper 10 inches:* 2.8 percent  
*Typical profile:*  
     Ap—0 to 9 inches; very fine sandy loam  
     Bk1,Bk2—9 to 31 inches; very fine sandy loam  
     2C1-2C4—31 to 80 inches; clay

### **Thiefriever**

*Extent:* 1 percent of the unit  
*Geomorphic component:* Flats and swales on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 3.8 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, December  
*Deepest ponding:* 0.3 foot (April, May, June)  
*Available water capacity to a depth of 60 inches:* 7.5 inches  
*Content of organic matter in the upper 10 inches:* 6 percent  
*Typical profile:*  
     Ap,A—0 to 12 inches; fine sandy loam

Bkg1-Bkg3—12 to 23 inches; loamy fine sand  
 Cg1—23 to 32 inches; fine sand  
 2Cg2,2Cg3—32 to 80 inches; clay

### **Wyandotte**

*Extent:* 1 percent of the unit  
*Geomorphic component:* Swales and flats on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Clay loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 3.8 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, September, November, December  
*Deepest ponding:* 0.3 foot (April, May, June)  
*Available water capacity to a depth of 60 inches:* 6.5 inches  
*Content of organic matter in the upper 10 inches:* 4.1 percent  
*Typical profile:*  
 Ap—0 to 8 inches; clay loam  
 Bk—8 to 15 inches; sandy clay loam  
 2C1-2C3—15 to 34 inches; very gravelly loamy coarse sand  
 3Cg—34 to 60 inches; clay

### **Major Uses of the Map Unit**

- Cropland, pasture, hayland

## **I33A—Hilaire loamy fine sand, 0 to 3 percent slopes**

### **Component Description**

#### **Hilaire and similar soils**

*Extent:* 75 percent of the unit  
*Geomorphic component:* Rises on lake plains  
*Slope range:* 0 to 3 percent  
*Texture of the surface layer:* Loamy fine sand  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 2.5 feet (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 6.5 inches  
*Content of organic matter in the upper 10 inches:* 3 percent  
*Typical profile:*  
 Ap,A—0 to 10 inches; loamy fine sand  
 Bw1-Bw4—10 to 34 inches; fine sand  
 2BCk—34 to 80 inches; clay

#### **Espelie**

*Extent:* 12 percent of the unit  
*Geomorphic component:* Swales and flats on lake plains

*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 3.8 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, December  
*Deepest ponding:* 0.3 foot (April, May, June)  
*Available water capacity to a depth of 60 inches:* 7.1 inches  
*Content of organic matter in the upper 10 inches:* 5.6 percent  
*Typical profile:*  
     Ap—0 to 9 inches; fine sandy loam  
     Bw1,Bw2—9 to 24 inches; fine sand  
     2Bg-2Cg—24 to 80 inches; clay

### **Huot**

*Extent:* 5 percent of the unit  
*Geomorphic component:* Rises on lake plains  
*Slope range:* 0 to 3 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 2.5 feet (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 7.6 inches  
*Content of organic matter in the upper 10 inches:* 3 percent  
*Typical profile:*  
     Ap,Ak—0 to 14 inches; fine sandy loam  
     Bk—14 to 26 inches; loamy fine sand  
     C1—26 to 34 inches; fine sand  
     2C2,2C3—34 to 80 inches; clay

### **Flaming**

*Extent:* 2 percent of the unit  
*Geomorphic component:* Rises on lake plains  
*Slope range:* 0 to 3 percent  
*Texture of the surface layer:* Loamy fine sand  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Glaciolacustrine deposits  
*Flooding:* None  
*Shallowest depth to wet zone:* 2.5 feet (April)  
*Deepest depth to wet zone:* More than 6.7 feet (July, August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 4.9 inches  
*Content of organic matter in the upper 10 inches:* 3 percent  
*Typical profile:*  
     Ap,A—0 to 12 inches; loamy fine sand  
     BA—12 to 17 inches; fine sand

Bw—17 to 27 inches; fine sand  
 C1,C2—27 to 60 inches; fine sand

### **Foxlake**

*Extent:* 2 percent of the unit  
*Geomorphic component:* Swales and flats on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Till  
*Flooding:* None  
*Shallowest depth to wet zone:* At the surface (April)  
*Deepest depth to wet zone:* 3 feet (August)  
*Months when ponding does not occur:* January, February, March, December  
*Deepest ponding:* 0.3 foot (April, May, June, November)  
*Available water capacity to a depth of 60 inches:* 8.9 inches  
*Content of organic matter in the upper 10 inches:* 5 percent  
*Typical profile:*  
     Ap,A—0 to 19 inches; loam  
     Bg—19 to 38 inches; silty clay  
     Bkg—38 to 49 inches; clay  
     Cg—49 to 80 inches; clay

### **Wheatville**

*Extent:* 2 percent of the unit  
*Geomorphic component:* Rises on lake plains  
*Slope range:* 0 to 3 percent  
*Texture of the surface layer:* Very fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Somewhat poorly drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 1.3 feet (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 9.4 inches  
*Content of organic matter in the upper 10 inches:* 2.8 percent  
*Typical profile:*  
     Ap—0 to 9 inches; very fine sandy loam  
     Bk1,Bk2—9 to 31 inches; very fine sandy loam  
     2C1-2C4—31 to 80 inches; clay

### **Thiefriver**

*Extent:* 1 percent of the unit  
*Geomorphic component:* Swales and flats on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 3.8 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, December

*Deepest ponding:* 0.3 foot (April, May, June)  
*Available water capacity to a depth of 60 inches:* 7.5 inches  
*Content of organic matter in the upper 10 inches:* 6 percent  
*Typical profile:*

Ap,A—0 to 12 inches; fine sandy loam  
 Bkg1-Bkg3—12 to 23 inches; loamy fine sand  
 Cg1—23 to 32 inches; fine sand  
 2Cg2,2Cg3—32 to 80 inches; clay

### **Wyandotte**

*Extent:* 1 percent of the unit  
*Geomorphic component:* Flats and swales on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Clay loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 3.8 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, September, November, December  
*Deepest ponding:* 0.3 foot (April, May, June)  
*Available water capacity to a depth of 60 inches:* 6.5 inches  
*Content of organic matter in the upper 10 inches:* 4.1 percent  
*Typical profile:*

Ap—0 to 8 inches; clay loam  
 Bk—8 to 15 inches; sandy clay loam  
 2C1-2C3—15 to 34 inches; very gravelly loamy coarse sand  
 3Cg—34 to 60 inches; clay

### **Major Uses of the Map Unit**

- Cropland, pasture, hayland

## **I34A—Huot fine sandy loam, 0 to 3 percent slopes**

### **Component Description**

#### **Huot and similar soils**

*Extent:* 75 percent of the unit  
*Geomorphic component:* Rises on lake plains  
*Slope range:* 0 to 3 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 2.5 feet (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 7.6 inches  
*Content of organic matter in the upper 10 inches:* 3 percent  
*Typical profile:*

Ap,Ak—0 to 14 inches; fine sandy loam

Bk—14 to 26 inches; loamy fine sand  
 C1—26 to 34 inches; fine sand  
 2C2,2C3—34 to 80 inches; clay

### **Thiefriver**

*Extent:* 12 percent of the unit  
*Geomorphic component:* Swales and flats on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 3.8 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, December  
*Deepest ponding:* 0.3 foot (April, May, June)  
*Available water capacity to a depth of 60 inches:* 7.5 inches  
*Content of organic matter in the upper 10 inches:* 6 percent  
*Typical profile:*  
     Ap,A—0 to 12 inches; fine sandy loam  
     Bkg1-Bkg3—12 to 23 inches; loamy fine sand  
     Cg1—23 to 32 inches; fine sand  
     2Cg2,2Cg3—32 to 80 inches; clay

### **Hilaire**

*Extent:* 5 percent of the unit  
*Geomorphic component:* Rises on lake plains  
*Slope range:* 0 to 3 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 2.5 feet (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 6.9 inches  
*Content of organic matter in the upper 10 inches:* 3 percent  
*Typical profile:*  
     Ap,A—0 to 10 inches; fine sandy loam  
     Bw1-Bw4—10 to 34 inches; fine sand  
     2BCk—34 to 80 inches; clay

### **Flaming**

*Extent:* 3 percent of the unit  
*Geomorphic component:* Rises on lake plains  
*Slope range:* 0 to 3 percent  
*Texture of the surface layer:* Loamy fine sand  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Glaciolacustrine deposits  
*Flooding:* None  
*Shallowest depth to wet zone:* 2.5 feet (April)

*Deepest depth to wet zone:* More than 6.7 feet (July, August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 4.9 inches

*Content of organic matter in the upper 10 inches:* 3 percent

*Typical profile:*

Ap,A—0 to 12 inches; loamy fine sand

BA—12 to 17 inches; fine sand

Bw—17 to 27 inches; fine sand

C1,C2—27 to 60 inches; fine sand

### **Foxlake**

*Extent:* 3 percent of the unit

*Geomorphic component:* Swales and flats on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (April)

*Deepest depth to wet zone:* 3 feet (August)

*Months when ponding does not occur:* January, February, March, December

*Deepest ponding:* 0.3 foot (April, May, June, November)

*Available water capacity to a depth of 60 inches:* 8.9 inches

*Content of organic matter in the upper 10 inches:* 5 percent

*Typical profile:*

Ap,A—0 to 19 inches; loam

Bg—19 to 38 inches; silty clay

Bkg—38 to 49 inches; clay

Cg—49 to 80 inches; clay

### **Ulen**

*Extent:* 2 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Moderately well drained

*Parent material:* Glaciolacustrine deposits

*Flooding:* None

*Shallowest depth to wet zone:* 2 feet (April)

*Deepest depth to wet zone:* More than 6.7 feet (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 5.8 inches

*Content of organic matter in the upper 10 inches:* 2.8 percent

*Typical profile:*

Ap,Ak—0 to 9 inches; fine sandy loam

Bk1,Bk2—9 to 42 inches; loamy fine sand

C—42 to 60 inches; fine sand

### **Major Uses of the Map Unit**

- Cropland, pasture, hayland

## I35A—Karlsruhe sandy loam, 0 to 3 percent slopes

### Component Description

#### **Karlsruhe and similar soils**

*Extent:* 70 percent of the unit

*Geomorphic component:* Rises on beach plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Somewhat poorly drained

*Parent material:* Beach deposits

*Flooding:* None

*Shallowest depth to wet zone:* 2 feet (April)

*Deepest depth to wet zone:* 6.7 feet (transitory) (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 5.2 inches

*Content of organic matter in the upper 10 inches:* 4 percent

*Typical profile:*

A, Ak, ABk—0 to 15 inches; sandy loam

Bk, Bck—15 to 30 inches; loamy sand

C1, C2—30 to 60 inches; coarse sand

#### **Syrene**

*Extent:* 10 percent of the unit

*Geomorphic component:* Swales and flats on beach plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Beach deposits

*Flooding:* None

*Shallowest depth to wet zone:* 0.3 foot (April)

*Deepest depth to wet zone:* 3.3 feet (February, August)

*Months when ponding does not occur:* January, February, March, July, August, September, October, November, December

*Deepest ponding:* 0.3 foot (April, May)

*Available water capacity to a depth of 60 inches:* 3.8 inches

*Content of organic matter in the upper 10 inches:* 5.6 percent

*Typical profile:*

Ap—0 to 9 inches; sandy loam

Bkg1—9 to 17 inches; sandy loam

2Bkg2—17 to 27 inches; stratified loamy fine sand to gravelly coarse sand

2Cg—27 to 60 inches; stratified loamy fine sand to gravelly coarse sand

#### **Ulen**

*Extent:* 10 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Loamy fine sand

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Somewhat poorly drained

*Parent material:* Glaciolacustrine deposits

*Flooding:* None

*Shallowest depth to wet zone:* 2 feet (April)

*Deepest depth to wet zone:* More than 6.7 feet (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 5.4 inches

*Content of organic matter in the upper 10 inches:* 2.8 percent

*Typical profile:*

Ap—0 to 9 inches; loamy fine sand

Bk1,Bk2—9 to 42 inches; loamy fine sand

C—42 to 60 inches; fine sand

### **Radium**

*Extent:* 5 percent of the unit

*Geomorphic component:* Beach ridges

*Position on the landform:* Backslopes

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Loamy sand

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Moderately well drained

*Parent material:* Beach deposits

*Flooding:* None

*Shallowest depth to wet zone:* 3 feet (April)

*Deepest depth to wet zone:* More than 6.7 feet (July, August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 3.8 inches

*Content of organic matter in the upper 10 inches:* 2 percent

*Typical profile:*

Ap—0 to 14 inches; loamy sand

Bw1,Bw2—14 to 33 inches; sand

C1—33 to 43 inches; very gravelly coarse sand

C2-C4—43 to 80 inches; sand

### **Rosewood**

*Extent:* 3 percent of the unit

*Geomorphic component:* Flats and swales on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 4.9 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, September, November, December

*Deepest ponding:* 0.3 foot (April, May, June, October)

*Available water capacity to a depth of 60 inches:* 5.6 inches

*Content of organic matter in the upper 10 inches:* 5 percent

*Typical profile:*

Ap—0 to 8 inches; fine sandy loam

Bkg1,Bkg2—8 to 18 inches; fine sandy loam

Cg1-Cg3—18 to 80 inches; fine sand

### **Sandberg**

*Extent:* 2 percent of the unit

*Geomorphic component:* Beach ridges

*Position on the landform:* Shoulders, summits, and backslopes

*Slope range:* 1 to 6 percent

*Texture of the surface layer:* Loamy sand

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Excessively drained

*Parent material:* Beach deposits

*Flooding:* None

*Depth to wet zone:* More than 6.7 feet (all year)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 3.1 inches

*Content of organic matter in the upper 10 inches:* 2 percent

*Typical profile:*

Ap,A—0 to 12 inches; loamy sand

Bw—12 to 19 inches; gravelly loamy coarse sand

Bk—19 to 29 inches; gravelly coarse sand

C—29 to 80 inches; gravelly coarse sand

### **Major Uses of the Map Unit**

- Cropland, pasture, hayland

## **I36A—Kittson loam, 0 to 3 percent slopes**

### **Component Description**

#### **Kittson and similar soils**

*Extent:* 70 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Moderately well drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 2.5 feet (April)

*Deepest depth to wet zone:* 6.7 feet (transitory) (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 10.5 inches

*Content of organic matter in the upper 10 inches:* 3 percent

*Typical profile:*

Ap—0 to 10 inches; loam

Bw—10 to 17 inches; fine sandy loam

2Bk1,2Bk2—17 to 36 inches; loam

2C—36 to 60 inches; loam

#### **Roliss**

*Extent:* 12 percent of the unit

*Geomorphic component:* Swales and flats on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 3.8 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, December

*Deepest ponding:* 0.3 foot (April, May, June, September, October, November)

*Available water capacity to a depth of 60 inches:* 10.7 inches

*Content of organic matter in the upper 10 inches:* 5 percent

*Typical profile:*

Ap,A—0 to 14 inches; loam

Bg—14 to 20 inches; loam

Cg1-Cg4—20 to 80 inches; loam

### **Hamerly**

*Extent:* 5 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Somewhat poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* 1.3 feet (April)

*Deepest depth to wet zone:* 6.7 feet (transitory) (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 10.5 inches

*Content of organic matter in the upper 10 inches:* 2.5 percent

*Typical profile:*

Ap—0 to 8 inches; loam

Bk1,Bk2—8 to 25 inches; loam

C—25 to 60 inches; loam

### **Kratka**

*Extent:* 5 percent of the unit

*Geomorphic component:* Flats and swales on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 4.1 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, September, December

*Deepest ponding:* 0.3 foot (April, May)

*Available water capacity to a depth of 60 inches:* 9.1 inches

*Content of organic matter in the upper 10 inches:* 6 percent

*Typical profile:*

Ap,A—0 to 11 inches; fine sandy loam

Bg1,Bg2—11 to 18 inches; loamy fine sand

Cg1—18 to 25 inches; fine sand

2Cg2-2Cg4—25 to 80 inches; loam

### **Grimstad**

*Extent:* 3 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Somewhat poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 1.5 feet (April)

*Deepest depth to wet zone:* More than 6.7 feet (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 9.2 inches

*Content of organic matter in the upper 10 inches:* 2.8 percent

*Typical profile:*

Ap—0 to 9 inches; fine sandy loam

Bk1,Bk2—9 to 22 inches; loamy fine sand

C1—22 to 28 inches; fine sand

2C2,2C3—28 to 60 inches; loam

### **Strandquist**

*Extent:* 3 percent of the unit

*Geomorphic component:* Swales and flats on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 4.1 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, September, November, December

*Deepest ponding:* 0.3 foot (April, May, June, October)

*Available water capacity to a depth of 60 inches:* 9.3 inches

*Content of organic matter in the upper 10 inches:* 6 percent

*Typical profile:*

Ap—0 to 10 inches; loam

2Bg1—10 to 20 inches; very gravelly sand

3Bg2,3Cg—20 to 60 inches; loam

### **Foxhome**

*Extent:* 2 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Moderately well drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 2.5 feet (April)

*Deepest depth to wet zone:* 6.7 feet (transitory) (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 8.6 inches

*Content of organic matter in the upper 10 inches:* 3 percent

*Typical profile:*

Ap—0 to 10 inches; sandy loam

Bw1—10 to 15 inches; sand

2Bw2—15 to 23 inches; very gravelly coarse sand

3C1-3C3—23 to 80 inches; loam

## Major Uses of the Map Unit

- Cropland

## I37A—Kratka and Strathcona soils, depressional, 0 to 1 percent slopes

### Component Description

#### **Kratka, depressional, and similar soils**

*Extent:* 0 to 90 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Mucky fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May)

*Deepest depth to wet zone:* 2.5 feet (February, August)

*Shallowest ponding:* 0.3 foot (July, August, September, October)

*Deepest ponding:* 0.5 foot (January, February, March, April, May, June, November, December)

*Available water capacity to a depth of 60 inches:* 10 inches

*Content of organic matter in the upper 10 inches:* 10 percent

*Typical profile:*

Ap,A—0 to 11 inches; mucky fine sandy loam

Bg1,Bg2—11 to 18 inches; loamy fine sand

Cg1—18 to 25 inches; fine sand

2Cg2-2Cg4—25 to 80 inches; loam

#### **Strathcona, depressional, and similar soils**

*Extent:* 0 to 90 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Mucky fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May)

*Deepest depth to wet zone:* 2.5 feet (February, August)

*Shallowest ponding:* 0.3 foot (July, August, September, October)

*Deepest ponding:* 0.5 foot (January, February, March, April, May, June, November, December)

*Available water capacity to a depth of 60 inches:* 9.9 inches

*Content of organic matter in the upper 10 inches:* 10 percent

*Typical profile:*

Ap—0 to 10 inches; mucky fine sandy loam

Bkg—10 to 17 inches; loamy fine sand

Cg1—17 to 28 inches; fine sand

2Cg2,2Cg3—28 to 80 inches; loam

#### **Northwood**

*Extent:* 0 to 10 percent of the unit

*Geomorphic component:* Depressions on lake plains  
*Slope range:* 0 to 1 percent  
*Texture of the surface layer:* Muck  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Very poorly drained  
*Parent material:* Organic material over glaciolacustrine deposits and/or till  
*Flooding:* None  
*Shallowest depth to wet zone:* At the surface (March, April, May)  
*Deepest depth to wet zone:* 2.5 feet (February)  
*Shallowest ponding:* 0.3 foot (July, August, September)  
*Deepest ponding:* 0.5 foot (January, February, March, April, May, June, October, November, December)  
*Available water capacity to a depth of 60 inches:* 11.3 inches  
*Content of organic matter in the upper 10 inches:* 78.6 percent  
*Typical profile:*  
     Oa—0 to 9 inches; muck  
     A—9 to 14 inches; loamy fine sand  
     Bg1,Bg2—14 to 24 inches; fine sand  
     2BCkg-2Cg—24 to 80 inches; loam

#### **Kratka**

*Extent:* 0 to 10 percent of the unit  
*Geomorphic component:* Swales and flats on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 4.1 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, September, December  
*Deepest ponding:* 0.3 foot (April, May)  
*Available water capacity to a depth of 60 inches:* 9.1 inches  
*Content of organic matter in the upper 10 inches:* 6 percent  
*Typical profile:*  
     Ap,A—0 to 11 inches; fine sandy loam  
     Bg1,Bg2—11 to 18 inches; loamy fine sand  
     Cg1—18 to 25 inches; fine sand  
     2Cg2-2Cg4—25 to 80 inches; loam

#### **Strathcona**

*Extent:* 0 to 10 percent of the unit  
*Geomorphic component:* Flats and swales on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 4.1 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, September, December

*Deepest ponding:* 0.3 foot (April, May)  
*Available water capacity to a depth of 60 inches:* 9 inches  
*Content of organic matter in the upper 10 inches:* 6 percent  
*Typical profile:*

Ap—0 to 10 inches; fine sandy loam  
 Bkg—10 to 17 inches; fine sandy loam  
 Cg1—17 to 28 inches; fine sand  
 2Cg2,2Cg3—28 to 80 inches; loam

### **Roliss**

*Extent:* 0 to 10 percent of the unit  
*Geomorphic component:* Swales and flats on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 3.8 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, December  
*Deepest ponding:* 0.3 foot (April, May, June, September, October, November)  
*Available water capacity to a depth of 60 inches:* 10.7 inches  
*Content of organic matter in the upper 10 inches:* 5 percent  
*Typical profile:*

Ap,A—0 to 14 inches; loam  
 Bg—14 to 20 inches; loam  
 Cg1-Cg4—20 to 80 inches; loam

### **Major Uses of the Map Unit**

- Pasture, hayland, wildlife habitat

## **I38A—Kratka fine sandy loam, 0 to 2 percent slopes**

### **Component Description**

#### **Kratka and similar soils**

*Extent:* 70 percent of the unit  
*Geomorphic component:* Swales and flats on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 4.1 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, September, December  
*Deepest ponding:* 0.3 foot (April, May)  
*Available water capacity to a depth of 60 inches:* 9.1 inches  
*Content of organic matter in the upper 10 inches:* 6 percent  
*Typical profile:*

Ap,A—0 to 11 inches; fine sandy loam

Bg1,Bg2—11 to 18 inches; loamy fine sand  
 Cg1—18 to 25 inches; fine sand  
 2Cg2-2Cg4—25 to 80 inches; loam

### **Smiley**

*Extent:* 7 percent of the unit  
*Geomorphic component:* Flats and swales on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 3.8 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, December  
*Deepest ponding:* 0.3 foot (April, May, June, September, October, November)  
*Available water capacity to a depth of 60 inches:* 10.8 inches  
*Content of organic matter in the upper 10 inches:* 5 percent  
*Typical profile:*  
     Ap—0 to 12 inches; loam  
     Btg—12 to 19 inches; clay loam  
     Bkg1-Bkg3—19 to 42 inches; loam  
     Cg1,Cg2—42 to 80 inches; loam

### **Foldahl**

*Extent:* 5 percent of the unit  
*Geomorphic component:* Rises on lake plains  
*Slope range:* 0 to 3 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 2.5 feet (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 8.8 inches  
*Content of organic matter in the upper 10 inches:* 3 percent  
*Typical profile:*  
     Ap,A—0 to 12 inches; fine sandy loam  
     Bw1,Bw2—12 to 30 inches; fine sand  
     2BCk-2C3—30 to 80 inches; loam

### **Kratka, very cobbly**

*Extent:* 5 percent of the unit  
*Geomorphic component:* Swales and flats on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 4.1 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, September, December

*Deepest ponding:* 0.3 foot (April, May)

*Available water capacity to a depth of 60 inches:* 9.1 inches

*Content of organic matter in the upper 10 inches:* 6 percent

*Typical profile:*

Ap,A—0 to 11 inches; fine sandy loam

Bg1,Bg2—11 to 18 inches; loamy fine sand

Cg1—18 to 25 inches; fine sand

2Cg2-2Cg4—25 to 80 inches; loam

### **Strathcona**

*Extent:* 5 percent of the unit

*Geomorphic component:* Flats and swales on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 4.1 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, September, December

*Deepest ponding:* 0.3 foot (April, May)

*Available water capacity to a depth of 60 inches:* 9 inches

*Content of organic matter in the upper 10 inches:* 6 percent

*Typical profile:*

Ap—0 to 10 inches; fine sandy loam

Bkg—10 to 17 inches; fine sandy loam

Cg1—17 to 28 inches; fine sand

2Cg2,2Cg3—28 to 80 inches; loam

### **Kratka, depressional**

*Extent:* 3 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Mucky fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May)

*Deepest depth to wet zone:* 2.5 feet (February, August)

*Shallowest ponding:* 0.3 foot (July, August, September, October)

*Deepest ponding:* 0.5 foot (January, February, March, April, May, June, November, December)

*Available water capacity to a depth of 60 inches:* 10 inches

*Content of organic matter in the upper 10 inches:* 10 percent

*Typical profile:*

Ap,A—0 to 11 inches; mucky fine sandy loam

Bg1,Bg2—11 to 18 inches; loamy fine sand

Cg1—18 to 25 inches; fine sand

2Cg2-2Cg4—25 to 80 inches; loam

**Strandquist**

*Extent:* 3 percent of the unit

*Geomorphic component:* Swales and flats on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 4.1 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, September, November, December

*Deepest ponding:* 0.3 foot (April, May, June, October)

*Available water capacity to a depth of 60 inches:* 9.3 inches

*Content of organic matter in the upper 10 inches:* 6 percent

*Typical profile:*

Ap—0 to 10 inches; loam

2Bg1—10 to 20 inches; very gravelly sand

3Bg2,3Cg—20 to 60 inches; loam

**Linveldt**

*Extent:* 2 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Moderately well drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 2.5 feet (April)

*Deepest depth to wet zone:* 6.7 feet (transitory) (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 8.9 inches

*Content of organic matter in the upper 10 inches:* 2.8 percent

*Typical profile:*

Ap—0 to 9 inches; fine sandy loam

Bt—9 to 16 inches; loam

2Bw1,2Bw2—16 to 29 inches; sand

3Bk—29 to 45 inches; loam

3C1-3C3—45 to 80 inches; loam

**Major Uses of the Map Unit**

- Cropland, pasture, hayland

**139A—Linveldt fine sandy loam, 0 to 3 percent slopes****Component Description****Linveldt and similar soils**

*Extent:* 65 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Moderately well drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 2.5 feet (April)

*Deepest depth to wet zone:* 6.7 feet (transitory) (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 8.9 inches

*Content of organic matter in the upper 10 inches:* 2.8 percent

*Typical profile:*

Ap—0 to 9 inches; fine sandy loam

Bt—9 to 16 inches; loam

2Bw1,2Bw2—16 to 29 inches; sand

3Bk—29 to 45 inches; loam

3C1-3C3—45 to 80 inches; loam

### **Kratka**

*Extent:* 14 percent of the unit

*Geomorphic component:* Swales and flats on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 4.1 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, September, December

*Deepest ponding:* 0.3 foot (April, May)

*Available water capacity to a depth of 60 inches:* 9.1 inches

*Content of organic matter in the upper 10 inches:* 6 percent

*Typical profile:*

Ap,A—0 to 11 inches; fine sandy loam

Bg1,Bg2—11 to 18 inches; loamy fine sand

Cg1—18 to 25 inches; fine sand

2Cg2-2Cg4—25 to 80 inches; loam

### **Reiner**

*Extent:* 10 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Moderately well drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* 2.5 feet (April)

*Deepest depth to wet zone:* 6.7 feet (transitory) (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 10.2 inches

*Content of organic matter in the upper 10 inches:* 2.3 percent

*Typical profile:*

Ap—0 to 7 inches; fine sandy loam

Bt—7 to 17 inches; clay loam

Bw,Bk1,Bk2—17 to 35 inches; loam

C1-C3—35 to 80 inches; loam

### **Smiley**

*Extent:* 5 percent of the unit

*Geomorphic component:* Flats and swales on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 3.8 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, December

*Deepest ponding:* 0.3 foot (April, May, June, September, October, November)

*Available water capacity to a depth of 60 inches:* 10.8 inches

*Content of organic matter in the upper 10 inches:* 5 percent

*Typical profile:*

Ap—0 to 12 inches; loam

Btg—12 to 19 inches; clay loam

Bkg1-Bkg3—19 to 42 inches; loam

Cg1,Cg2—42 to 80 inches; loam

### **Eckvoll**

*Extent:* 3 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Loamy fine sand

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Moderately well drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 2.5 feet (April)

*Deepest depth to wet zone:* 6.7 feet (transitory) (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 8.3 inches

*Content of organic matter in the upper 10 inches:* 1.9 percent

*Typical profile:*

Ap—0 to 9 inches; loamy fine sand

E1,E2—9 to 25 inches; fine sand

2Bt—25 to 32 inches; sandy clay loam

2BCk-2C1,2C2—32 to 80 inches; loam

### **Foldahl**

*Extent:* 2 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Moderately well drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 2.5 feet (April)

*Deepest depth to wet zone:* 6.7 feet (transitory) (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 8.8 inches

*Content of organic matter in the upper 10 inches:* 3 percent

*Typical profile:*

Ap,A—0 to 12 inches; fine sandy loam

Bw1,Bw2—12 to 30 inches; fine sand

2BCK-2C3—30 to 80 inches; loam

### **Pelan**

*Extent:* 1 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Moderately well drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 2.5 feet (April)

*Deepest depth to wet zone:* 6.7 feet (transitory) (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 8.5 inches

*Content of organic matter in the upper 10 inches:* 1.4 percent

*Typical profile:*

Ap—0 to 6 inches; sandy loam

E—6 to 9 inches; sand

Bt—9 to 14 inches; very gravelly sandy loam

Bw—14 to 20 inches; very gravelly coarse sand

2Bw—20 to 60 inches; loam

### **Major Uses of the Map Unit**

- Cropland, pasture, hayland

## **I40B—Maddock loamy fine sand, 1 to 6 percent slopes**

### **Component Description**

#### **Maddock and similar soils**

*Extent:* 85 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 1 to 6 percent

*Texture of the surface layer:* Loamy fine sand

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Well drained

*Parent material:* Glaciolacustrine deposits

*Flooding:* None

*Depth to wet zone:* More than 6.7 feet (all year)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 4.7 inches

*Content of organic matter in the upper 10 inches:* 1.5 percent

*Typical profile:*

A—0 to 10 inches; loamy fine sand

Bw—10 to 14 inches; fine sand

C1-C3—14 to 60 inches; fine sand

**Flaming**

*Extent:* 5 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Loamy fine sand

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Moderately well drained

*Parent material:* Glaciolacustrine deposits

*Flooding:* None

*Shallowest depth to wet zone:* 2.5 feet (April)

*Deepest depth to wet zone:* More than 6.7 feet (July, August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 4.9 inches

*Content of organic matter in the upper 10 inches:* 3 percent

*Typical profile:*

Ap,A—0 to 12 inches; loamy fine sand

BA—12 to 17 inches; fine sand

Bw—17 to 27 inches; fine sand

C1,C2—27 to 60 inches; fine sand

**Sandberg**

*Extent:* 5 percent of the unit

*Geomorphic component:* Beach ridges

*Position on the landform:* Shoulders, summits, and backslopes

*Slope range:* 1 to 6 percent

*Texture of the surface layer:* Loamy sand

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Excessively drained

*Parent material:* Beach deposits

*Flooding:* None

*Depth to wet zone:* More than 6.7 feet (all year)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 3.1 inches

*Content of organic matter in the upper 10 inches:* 2 percent

*Typical profile:*

Ap,A—0 to 12 inches; loamy sand

Bw—12 to 19 inches; gravelly loamy coarse sand

Bk—19 to 29 inches; gravelly coarse sand

C—29 to 80 inches; gravelly coarse sand

**Halverson**

*Extent:* 3 percent of the unit

*Geomorphic component:* Ridges on till plains

*Position on the landform:* Summits, shoulders, and backslopes

*Slope range:* 1 to 6 percent

*Texture of the surface layer:* Loamy fine sand

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Well drained

*Parent material:* Glacial outwash over till or eolian deposits

*Flooding:* None

*Depth to wet zone:* More than 6.7 feet (all year)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 8.5 inches

*Content of organic matter in the upper 10 inches:* 1.5 percent

*Typical profile:*

- Ap—0 to 10 inches; loamy fine sand
- E—10 to 23 inches; loamy fine sand
- 2Bt—23 to 35 inches; loam
- 2Bk1,2Bk2—35 to 55 inches; fine sandy loam
- 2C—55 to 80 inches; fine sandy loam

**Hamar**

- Extent:* 2 percent of the unit
- Geomorphic component:* Flats and swales on lake plains
- Slope range:* 0 to 2 percent
- Texture of the surface layer:* Loamy fine sand
- Depth to restrictive feature:* Very deep (more than 60 inches)
- Drainage class:* Poorly drained
- Parent material:* Glaciolacustrine deposits
- Flooding:* None
- Shallowest depth to wet zone:* 0.5 foot (April)
- Deepest depth to wet zone:* 4.9 feet (August)
- Months when ponding does not occur:* January, February, March, July, August, September, November, December
- Deepest ponding:* 0.3 foot (April, May, June, October)
- Available water capacity to a depth of 60 inches:* 5 inches
- Content of organic matter in the upper 10 inches:* 6 percent

*Typical profile:*

- A1,A2—0 to 12 inches; loamy fine sand
- AC—12 to 17 inches; loamy fine sand
- C1,C2—17 to 40 inches; fine sand
- Ab—40 to 47 inches; loamy fine sand
- Cg—47 to 60 inches; fine sand

**Major Uses of the Map Unit**

- Cropland, pasture, hayland

**I40F—Maddock loamy fine sand, 12 to 30 percent slopes****Component Description****Maddock and similar soils**

- Extent:* 90 percent of the unit
  - Geomorphic component:* Ridges on lake plains
  - Position on the landform:* Backslopes, shoulders, and summits
  - Slope range:* 12 to 30 percent
  - Texture of the surface layer:* Loamy fine sand
  - Depth to restrictive feature:* Very deep (more than 60 inches)
  - Drainage class:* Well drained
  - Parent material:* Glaciolacustrine deposits
  - Flooding:* None
  - Depth to wet zone:* More than 6.7 feet (all year)
  - Ponding:* None
  - Available water capacity to a depth of 60 inches:* 4.7 inches
  - Content of organic matter in the upper 10 inches:* 1.5 percent
- Typical profile:*
- A—0 to 10 inches; loamy fine sand
  - Bw—10 to 14 inches; fine sand
  - C1-C3—14 to 60 inches; fine sand

**Flaming**

*Extent:* 5 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Loamy fine sand

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Moderately well drained

*Parent material:* Glaciolacustrine deposits

*Flooding:* None

*Shallowest depth to wet zone:* 2.5 feet (April)

*Deepest depth to wet zone:* More than 6.7 feet (July, August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 4.9 inches

*Content of organic matter in the upper 10 inches:* 3 percent

*Typical profile:*

Ap,A—0 to 12 inches; loamy fine sand

BA—12 to 17 inches; fine sand

Bw—17 to 27 inches; fine sand

C1,C2—27 to 60 inches; fine sand

**Sandberg**

*Extent:* 5 percent of the unit

*Geomorphic component:* Beach ridges

*Position on the landform:* Shoulders, summits, and backslopes

*Slope range:* 1 to 6 percent

*Texture of the surface layer:* Loamy sand

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Excessively drained

*Parent material:* Beach deposits

*Flooding:* None

*Depth to wet zone:* More than 6.7 feet (all year)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 3.1 inches

*Content of organic matter in the upper 10 inches:* 2 percent

*Typical profile:*

Ap,A—0 to 12 inches; loamy sand

Bw—12 to 19 inches; gravelly loamy coarse sand

Bk—19 to 29 inches; gravelly coarse sand

C—29 to 80 inches; gravelly coarse sand

**Major Uses of the Map Unit**

- Pasture, hayland

**I41A—Markey muck, 0 to 1 percent slopes****Component Description****Markey and similar soils**

*Extent:* 80 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Muck

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Organic material over glaciolacustrine deposits

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May, June)

*Deepest depth to wet zone:* 2.1 feet (February)

*Shallowest ponding:* 0.3 foot (January, February, July, August, September, October, November, December)

*Deepest ponding:* 0.5 foot (March, April, May, June)

*Available water capacity to a depth of 60 inches:* 15.1 inches

*Content of organic matter in the upper 10 inches:* 85 percent

*Typical profile:*

Oa1-Oa4—0 to 32 inches; muck

Cg—32 to 60 inches; fine sand

### **Deerwood**

*Extent:* 12 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Muck

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Organic material over glaciolacustrine deposits

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May)

*Deepest depth to wet zone:* 2.5 feet (February)

*Shallowest ponding:* 0.3 foot (July, August, September)

*Deepest ponding:* 0.5 foot (January, February, March, April, May, June, October, November, December)

*Available water capacity to a depth of 60 inches:* 7.1 inches

*Content of organic matter in the upper 10 inches:* 75 percent

*Typical profile:*

Oa—0 to 10 inches; muck

A—10 to 12 inches; loamy sand

Cg1,Cg2—12 to 60 inches; sand

### **Berner**

*Extent:* 2 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Muck

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Organic material over glaciolacustrine deposits and/or till

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May, June)

*Deepest depth to wet zone:* 2.1 feet (February)

*Shallowest ponding:* 0.3 foot (January, February, July, August, September, October, November, December)

*Deepest ponding:* 0.5 foot (March, April, May, June)

*Available water capacity to a depth of 60 inches:* 15.9 inches

*Content of organic matter in the upper 10 inches:* 85 percent

*Typical profile:*

Oa1,Oa2—0 to 28 inches; muck

A—28 to 31 inches; sandy loam

Bg—31 to 44 inches; sand

2CBkg—44 to 80 inches; loam

**Hamar**

*Extent:* 2 percent of the unit

*Geomorphic component:* Swales and flats on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Loamy fine sand

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 4.9 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, September, November, December

*Deepest ponding:* 0.3 foot (April, May, June, October)

*Available water capacity to a depth of 60 inches:* 5 inches

*Content of organic matter in the upper 10 inches:* 6 percent

*Typical profile:*

A1,A2—0 to 12 inches; loamy fine sand

AC—12 to 17 inches; loamy fine sand

C1,C2—17 to 40 inches; fine sand

Ab—40 to 47 inches; loamy fine sand

Cg—47 to 60 inches; fine sand

**Seelyeville**

*Extent:* 2 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Muck

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Organic material

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May)

*Deepest depth to wet zone:* 1.6 feet (February, August)

*Shallowest ponding:* 0.3 foot (January, February, July, August, September, October, November, December)

*Deepest ponding:* 0.5 foot (March, April, May, June)

*Available water capacity to a depth of 60 inches:* 25.1 inches

*Content of organic matter in the upper 10 inches:* 90 percent

*Typical profile:*

Oa1—0 to 10 inches; muck

Oa2-Oa5—10 to 80 inches; muck

**Syrene**

*Extent:* 2 percent of the unit

*Geomorphic component:* Swales and flats on beach plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Beach deposits

*Flooding:* None

*Shallowest depth to wet zone:* 0.3 foot (April)

*Deepest depth to wet zone:* 3.3 feet (February, August)

*Months when ponding does not occur:* January, February, March, July, August, September, October, November, December

*Deepest ponding:* 0.3 foot (April, May)

*Available water capacity to a depth of 60 inches:* 3.8 inches

*Content of organic matter in the upper 10 inches:* 5.6 percent

*Typical profile:*

Ap—0 to 9 inches; sandy loam

Bkg1—9 to 17 inches; sandy loam

2Bkg2—17 to 27 inches; stratified loamy fine sand to gravelly coarse sand

2Cg—27 to 60 inches; stratified loamy fine sand to gravelly coarse sand

### Major Uses of the Map Unit

- Pasture, hayland, wildlife habitat

## I42A—Markey muck, ponded, 0 to 1 percent slopes

### Component Description

#### Markey, ponded, and similar soils

*Extent:* 85 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Muck

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Organic material over glaciolacustrine deposits

*Flooding:* None

*Depth to wet zone:* At the surface (all year)

*Ponding depth:* 1 foot (all year)

*Available water capacity to a depth of 60 inches:* 15.1 inches

*Content of organic matter in the upper 10 inches:* 85 percent

*Typical profile:*

Oa1-Oa4—0 to 32 inches; muck

Cg—32 to 60 inches; fine sand

#### Markey

*Extent:* 5 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Muck

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Organic material over glaciolacustrine deposits

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May, June)

*Deepest depth to wet zone:* 2.1 feet (February)

*Shallowest ponding:* 0.3 foot (January, February, July, August, September, October, November, December)

*Deepest ponding:* 0.5 foot (March, April, May, June)

*Available water capacity to a depth of 60 inches:* 15.1 inches

*Content of organic matter in the upper 10 inches:* 85 percent

*Typical profile:*

Oa1-Oa4—0 to 32 inches; muck

Cg—32 to 60 inches; fine sand

**Deerwood**

*Extent:* 4 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Muck

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Organic material over glaciolacustrine deposits

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May)

*Deepest depth to wet zone:* 2.5 feet (February)

*Shallowest ponding:* 0.3 foot (July, August, September)

*Deepest ponding:* 0.5 foot (January, February, March, April, May, June, October, November, December)

*Available water capacity to a depth of 60 inches:* 7.1 inches

*Content of organic matter in the upper 10 inches:* 75 percent

*Typical profile:*

Oa—0 to 10 inches; muck

A—10 to 12 inches; loamy sand

Cg1, Cg2—12 to 60 inches; sand

**Seelyeville, ponded**

*Extent:* 4 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Muck

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Organic materials

*Flooding:* None

*Depth to wet zone:* At the surface (all year)

*Ponding depth:* 1 foot (all year)

*Available water capacity to a depth of 60 inches:* 25.1 inches

*Content of organic matter in the upper 10 inches:* 90 percent

*Typical profile:*

Oa1—0 to 10 inches; muck

Oa2-Oa5—10 to 80 inches; muck

**Hamar**

*Extent:* 1 percent of the unit

*Geomorphic component:* Flats and swales on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Loamy fine sand

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 4.9 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, September, November, December

*Deepest ponding:* 0.3 foot (April, May, June, October)

*Available water capacity to a depth of 60 inches:* 5 inches

*Content of organic matter in the upper 10 inches:* 6 percent

*Typical profile:*

A1,A2—0 to 12 inches; loamy fine sand

AC—12 to 17 inches; loamy fine sand

C1,C2—17 to 40 inches; fine sand

Ab—40 to 47 inches; loamy fine sand

Cg—47 to 60 inches; fine sand

**Hangaard***Extent:* 1 percent of the unit*Geomorphic component:* Swales and flats on beach plains*Slope range:* 0 to 2 percent*Texture of the surface layer:* Sandy loam*Depth to restrictive feature:* Very deep (more than 60 inches)*Drainage class:* Poorly drained*Parent material:* Beach deposits*Flooding:* None*Shallowest depth to wet zone:* 0.3 foot (April)*Deepest depth to wet zone:* 3.3 feet (February, August)*Months when ponding does not occur:* January, February, March, July, August, September, October, November, December*Deepest ponding:* 0.3 foot (April, May)*Available water capacity to a depth of 60 inches:* 3 inches*Content of organic matter in the upper 10 inches:* 6 percent*Typical profile:*

Ap—0 to 10 inches; sandy loam

A—10 to 15 inches; loamy sand

Cg1-Cg5—15 to 80 inches; gravelly coarse sand

**Major Uses of the Map Unit**

- Wetland wildlife habitat

**I43A—Mavie fine sandy loam, 0 to 2 percent slopes****Component Description****Mavie and similar soils***Extent:* 70 percent of the unit*Geomorphic component:* Flats and swales on lake plains*Slope range:* 0 to 2 percent*Texture of the surface layer:* Fine sandy loam*Depth to restrictive feature:* Very deep (more than 60 inches)*Drainage class:* Poorly drained*Parent material:* Glaciolacustrine deposits over till*Flooding:* None*Shallowest depth to wet zone:* 0.5 foot (April)*Deepest depth to wet zone:* 4.1 feet (August)*Months when ponding does not occur:* January, February, March, July, August, September, November, December*Deepest ponding:* 0.3 foot (April, May, June, October)*Available water capacity to a depth of 60 inches:* 7.4 inches*Content of organic matter in the upper 10 inches:* 6 percent*Typical profile:*

Ap—0 to 12 inches; fine sandy loam

Bk—12 to 18 inches; sandy loam

2C1,2C2—18 to 39 inches; very gravelly coarse sand  
 3C3—39 to 80 inches; loam

### **Vallers**

*Extent:* 10 percent of the unit  
*Geomorphic component:* Swales and flats on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 3.8 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, December  
*Deepest ponding:* 0.3 foot (April, May, June, September, October, November)  
*Available water capacity to a depth of 60 inches:* 10.6 inches  
*Content of organic matter in the upper 10 inches:* 5 percent  
*Typical profile:*  
     A1,A2—0 to 12 inches; loam  
     Bkg1,Bkg2—12 to 21 inches; loam  
     Cg1,Cg2—21 to 60 inches; loam

### **Strandquist**

*Extent:* 7 percent of the unit  
*Geomorphic component:* Swales and flats on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 4.1 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, September, November, December  
*Deepest ponding:* 0.3 foot (April, May, June, October)  
*Available water capacity to a depth of 60 inches:* 9.3 inches  
*Content of organic matter in the upper 10 inches:* 6 percent  
*Typical profile:*  
     Ap—0 to 10 inches; loam  
     2Bg1—10 to 20 inches; very gravelly sand  
     3Bg2,3Cg—20 to 60 inches; loam

### **Strathcona**

*Extent:* 5 percent of the unit  
*Geomorphic component:* Swales and flats on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 4.1 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, September, December

*Deepest ponding:* 0.3 foot (April, May)

*Available water capacity to a depth of 60 inches:* 9 inches

*Content of organic matter in the upper 10 inches:* 6 percent

*Typical profile:*

Ap—0 to 10 inches; fine sandy loam

Bkg—10 to 17 inches; fine sandy loam

Cg1—17 to 28 inches; fine sand

2Cg2,2Cg3—28 to 80 inches; loam

### **Strathcona, depressional**

*Extent:* 3 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Mucky fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May)

*Deepest depth to wet zone:* 2.5 feet (February, August)

*Shallowest ponding:* 0.3 foot (July, August, September, October)

*Deepest ponding:* 0.5 foot (January, February, March, April, May, June, November, December)

*Available water capacity to a depth of 60 inches:* 9.9 inches

*Content of organic matter in the upper 10 inches:* 10 percent

*Typical profile:*

Ap—0 to 10 inches; mucky fine sandy loam

Bkg—10 to 17 inches; loamy fine sand

Cg1—17 to 28 inches; fine sand

2Cg2,2Cg3—28 to 80 inches; loam

### **Foxhome**

*Extent:* 2 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Moderately well drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 2.5 feet (April)

*Deepest depth to wet zone:* 6.7 feet (transitory) (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 8.6 inches

*Content of organic matter in the upper 10 inches:* 3 percent

*Typical profile:*

Ap—0 to 10 inches; sandy loam

Bw1—10 to 15 inches; loamy sand

2Bw2—15 to 23 inches; very gravelly coarse sand

3C1-3C3—23 to 80 inches; loam

### **Karlsruhe**

*Extent:* 2 percent of the unit

*Geomorphic component:* Rises on beach plains  
*Slope range:* 0 to 3 percent  
*Texture of the surface layer:* Sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Somewhat poorly drained  
*Parent material:* Beach deposits  
*Flooding:* None  
*Shallowest depth to wet zone:* 2 feet (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 5.2 inches  
*Content of organic matter in the upper 10 inches:* 4 percent  
*Typical profile:*  
     A,Ak,ABk—0 to 15 inches; sandy loam  
     Bk,BCk—15 to 30 inches; loamy sand  
     C1,C2—30 to 60 inches; coarse sand

### **Grimstad**

*Extent:* 1 percent of the unit  
*Geomorphic component:* Rises on lake plains  
*Slope range:* 0 to 3 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Somewhat poorly drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 1.5 feet (April)  
*Deepest depth to wet zone:* More than 6.7 feet (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 9.2 inches  
*Content of organic matter in the upper 10 inches:* 2.8 percent  
*Typical profile:*  
     Ap—0 to 9 inches; fine sandy loam  
     Bk1,Bk2—9 to 22 inches; loamy fine sand  
     C1—22 to 28 inches; fine sand  
     2C2,2C3—28 to 60 inches; loam

### **Major Uses of the Map Unit**

- Cropland, pasture, hayland

## **I44A—Newfolden loam, 0 to 3 percent slopes**

### **Component Description**

#### **Newfolden and similar soils**

*Extent:* 75 percent of the unit  
*Geomorphic component:* Rises on lake plains  
*Slope range:* 0 to 3 percent  
*Texture of the surface layer:* Loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Till  
*Flooding:* None  
*Shallowest depth to wet zone:* 2.5 feet (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 10.4 inches

*Content of organic matter in the upper 10 inches:* 2.3 percent

*Typical profile:*

Ap—0 to 7 inches; loam

Bt—7 to 16 inches; clay

2Bk1,2Bk2—16 to 36 inches; clay loam

2CBk—36 to 80 inches; loam

### **Smiley**

*Extent:* 12 percent of the unit

*Geomorphic component:* Swales and flats on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 3.8 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, December

*Deepest ponding:* 0.3 foot (April, May, June, September, October, November)

*Available water capacity to a depth of 60 inches:* 10.8 inches

*Content of organic matter in the upper 10 inches:* 5 percent

*Typical profile:*

Ap—0 to 12 inches; loam

Btg—12 to 19 inches; clay loam

Bkg1-Bkg3—19 to 42 inches; loam

Cg1,Cg2—42 to 80 inches; loam

### **Boash**

*Extent:* 8 percent of the unit

*Geomorphic component:* Swales and flats on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Clay loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (April)

*Deepest depth to wet zone:* 3 feet (August)

*Months when ponding does not occur:* January, February, March, December

*Deepest ponding:* 0.3 foot (April, May, June, November)

*Available water capacity to a depth of 60 inches:* 9.9 inches

*Content of organic matter in the upper 10 inches:* 4.7 percent

*Typical profile:*

Ap—0 to 9 inches; clay loam

Bg1,Bg2—9 to 29 inches; clay

2Cg1-2Cg3—29 to 80 inches; loam

### **Linveltd**

*Extent:* 4 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Moderately well drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 2.5 feet (April)

*Deepest depth to wet zone:* 6.7 feet (transitory) (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 8.9 inches

*Content of organic matter in the upper 10 inches:* 2.8 percent

*Typical profile:*

Ap—0 to 9 inches; fine sandy loam

Bt—9 to 16 inches; loam

2Bw1,2Bw2—16 to 29 inches; sand

3Bk—29 to 45 inches; loam

3C1-3C3—45 to 80 inches; loam

### **Hapludolls**

*Extent:* 1 percent of the unit

*Geomorphic component:* Hillslopes in drainageways; escarpments in drainageways

*Slope range:* 2 to 30 percent

*Texture of the surface layer:* Loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Well drained

*Parent material:* Glaciolacustrine deposits and/or till

*Months in which flooding does not occur:* February, December

*Highest frequency of flooding:* Rare (March, April, May, June, September, October, November)

*Shallowest depth to wet zone:* 6.7 feet (transitory) (March, April, May, November)

*Deepest depth to wet zone:* More than 6.7 feet (February, June, July, August, September, October, December)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 10.4 inches

*Content of organic matter in the upper 10 inches:* 1.9 percent

*Typical profile:*

A—0 to 9 inches; loam

C—9 to 60 inches; loam

### **Major Uses of the Map Unit**

- Cropland, pasture, hayland

## **I45A—Northwood muck, 0 to 1 percent slopes**

### **Component Description**

#### **Northwood and similar soils**

*Extent:* 75 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Muck

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Organic material over glaciolacustrine deposits and/or till

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May)

*Deepest depth to wet zone:* 2.5 feet (February)

*Shallowest ponding:* 0.3 foot (July, August, September)

*Deepest ponding:* 0.5 foot (January, February, March, April, May, June, October, November, December)

*Available water capacity to a depth of 60 inches:* 11.3 inches

*Content of organic matter in the upper 10 inches:* 78.6 percent

*Typical profile:*

- Oa—0 to 9 inches; muck
- A—9 to 14 inches; loamy fine sand
- Bg1,Bg2—14 to 24 inches; fine sand
- 2BCkg-2Cg—24 to 80 inches; loam

### **Hamre**

*Extent:* 10 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Muck

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May)

*Deepest depth to wet zone:* 2.5 feet (February)

*Shallowest ponding:* 0.3 foot (July, August, September)

*Deepest ponding:* 0.5 foot (January, February, March, April, May, June, October, November, December)

*Available water capacity to a depth of 60 inches:* 13.3 inches

*Content of organic matter in the upper 10 inches:* 85 percent

*Typical profile:*

- Oa—0 to 13 inches; muck
- A—13 to 18 inches; loam
- Bg1,Bg2—18 to 71 inches; loam
- Cg—71 to 80 inches; loam

### **Berner**

*Extent:* 5 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Muck

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Organic material over glaciolacustrine deposits and/or till

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May, June)

*Deepest depth to wet zone:* 2.1 feet (February)

*Shallowest ponding:* 0.3 foot (January, February, July, August, September, October, November, December)

*Deepest ponding:* 0.5 foot (March, April, May, June)

*Available water capacity to a depth of 60 inches:* 15.9 inches

*Content of organic matter in the upper 10 inches:* 85 percent

*Typical profile:*

- Oa1,Oa2—0 to 28 inches; muck
- A—28 to 31 inches; sandy loam
- Bg—31 to 44 inches; sand
- 2CBkg—44 to 80 inches; loam

### **Kratka**

*Extent:* 5 percent of the unit

*Geomorphic component:* Swales and flats on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 4.1 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, September, December  
*Deepest ponding:* 0.3 foot (April, May)  
*Available water capacity to a depth of 60 inches:* 9.1 inches  
*Content of organic matter in the upper 10 inches:* 6 percent  
*Typical profile:*  
     Ap,A—0 to 11 inches; fine sandy loam  
     Bg1,Bg2—11 to 18 inches; loamy fine sand  
     Cg1—18 to 25 inches; fine sand  
     2Cg2-2Cg4—25 to 80 inches; loam

### **Strandquist**

*Extent:* 3 percent of the unit  
*Geomorphic component:* Flats and swales on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 4.1 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, September, November, December  
*Deepest ponding:* 0.3 foot (April, May, June, October)  
*Available water capacity to a depth of 60 inches:* 9.3 inches  
*Content of organic matter in the upper 10 inches:* 6 percent  
*Typical profile:*  
     Ap—0 to 10 inches; loam  
     2Bg1—10 to 20 inches; very gravelly sand  
     3Bg2,3Cg—20 to 60 inches; loam

### **Roliss**

*Extent:* 2 percent of the unit  
*Geomorphic component:* Swales and flats on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 3.8 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, December  
*Deepest ponding:* 0.3 foot (April, May, June, September, October, November)

*Available water capacity to a depth of 60 inches:* 10.7 inches

*Content of organic matter in the upper 10 inches:* 5 percent

*Typical profile:*

Ap,A—0 to 14 inches; loam

Bg—14 to 20 inches; loam

Cg1-Cg4—20 to 80 inches; loam

### Major Uses of the Map Unit

- Pasture, hayland, wildlife habitat

## I46A—Pits, gravel and sand

### Component Description

#### Pits

*Extent:* 85 percent of the unit

*Geomorphic component:* Beach plains, lake plains, and beach ridges

*General definition:* Pits are areas that have been mined for gravel or sand. Specific areas are actively being mined or are abandoned pits. Because of the variability of this component, interpretations for various uses are not available. Onsite investigation is needed.

#### Udipsamments

*Extent:* 10 percent of the unit

*Geomorphic component:* Lake plains, beach plains, and beach ridges

*Slope range:* 1 to 50 percent

*Texture of the surface layer:* Sand

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Excessively drained

*Parent material:* Beach sand and/or glaciolacustrine deposits

*Flooding:* None

*Depth to wet zone:* More than 6.7 feet (all year)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 4.3 inches

*Content of organic matter in the upper 10 inches:* 0.2 percent

*Typical profile:*

A—0 to 14 inches; sand

C1—14 to 60 inches; sand

C2—60 to 80 inches; coarse sand

#### Radium

*Extent:* 2 percent of the unit

*Geomorphic component:* Beach ridges

*Position on the landform:* Backslopes

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Loamy sand

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Moderately well drained

*Parent material:* Beach deposits

*Flooding:* None

*Shallowest depth to wet zone:* 3 feet (April)

*Deepest depth to wet zone:* More than 6.7 feet (July, August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 3.8 inches

*Content of organic matter in the upper 10 inches:* 2 percent

*Typical profile:*

- Ap—0 to 14 inches; loamy sand
- Bw1,Bw2—14 to 33 inches; sand
- C1—33 to 43 inches; very gravelly coarse sand
- C2-C4—43 to 80 inches; sand

**Maddock**

- Extent:* 1 percent of the unit
- Geomorphic component:* Rises on lake plains
- Slope range:* 1 to 6 percent
- Texture of the surface layer:* Loamy fine sand
- Depth to restrictive feature:* Very deep (more than 60 inches)
- Drainage class:* Well drained
- Parent material:* Glaciolacustrine deposits
- Flooding:* None
- Depth to wet zone:* More than 6.7 feet (all year)
- Ponding:* None
- Available water capacity to a depth of 60 inches:* 4.7 inches
- Content of organic matter in the upper 10 inches:* 1.5 percent

*Typical profile:*

- A—0 to 10 inches; loamy fine sand
- Bw—10 to 14 inches; fine sand
- C1-C3—14 to 60 inches; fine sand

**Marquette**

- Extent:* 1 percent of the unit
- Geomorphic component:* Beach ridges
- Position on the landform:* Shoulders and summits
- Slope range:* 1 to 8 percent
- Texture of the surface layer:* Loamy sand
- Depth to restrictive feature:* Very deep (more than 60 inches)
- Drainage class:* Excessively drained
- Parent material:* Beach deposits
- Flooding:* None
- Depth to wet zone:* More than 6.7 feet (all year)
- Ponding:* None
- Available water capacity to a depth of 60 inches:* 3.1 inches
- Content of organic matter in the upper 10 inches:* 1.5 percent

*Typical profile:*

- A—0 to 6 inches; loamy sand
- E—6 to 9 inches; gravelly loamy fine sand
- Bt1,Bt2—9 to 14 inches; very gravelly fine sandy loam
- C1-C3—14 to 60 inches; stratified extremely gravelly coarse sand to fine sand

**Sandberg**

- Extent:* 1 percent of the unit
- Geomorphic component:* Beach ridges
- Position on the landform:* Shoulders, summits, and backslopes
- Slope range:* 1 to 6 percent
- Texture of the surface layer:* Loamy sand
- Depth to restrictive feature:* Very deep (more than 60 inches)
- Drainage class:* Excessively drained
- Parent material:* Beach deposits
- Flooding:* None
- Depth to wet zone:* More than 6.7 feet (all year)
- Ponding:* None

*Available water capacity to a depth of 60 inches:* 3.1 inches

*Content of organic matter in the upper 10 inches:* 2 percent

*Typical profile:*

Ap,A—0 to 12 inches; loamy sand

Bw—12 to 19 inches; gravelly loamy coarse sand

Bk—19 to 29 inches; gravelly coarse sand

C—29 to 80 inches; gravelly coarse sand

### Major Uses of the Map Unit

- Wildlife habitat

## 147A—Poppleton fine sand, 0 to 2 percent slopes

### Component Description

#### Poppleton and similar soils

*Extent:* 75 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Fine sand

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Moderately well drained

*Parent material:* Glaciolacustrine deposits

*Flooding:* None

*Shallowest depth to wet zone:* 2.5 feet (April)

*Deepest depth to wet zone:* More than 6.7 feet (July, August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 5 inches

*Content of organic matter in the upper 10 inches:* 1 percent

*Typical profile:*

Ap—0 to 6 inches; fine sand

E—6 to 9 inches; fine sand

Bw1-Bw4—9 to 40 inches; fine sand

C1,C2—40 to 60 inches; fine sand

#### Flaming

*Extent:* 12 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Loamy fine sand

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Moderately well drained

*Parent material:* Glaciolacustrine deposits

*Flooding:* None

*Shallowest depth to wet zone:* 2.5 feet (April)

*Deepest depth to wet zone:* More than 6.7 feet (July, August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 4.9 inches

*Content of organic matter in the upper 10 inches:* 3 percent

*Typical profile:*

Ap,A—0 to 12 inches; loamy fine sand

BA—12 to 17 inches; fine sand

Bw—17 to 27 inches; fine sand

C1,C2—27 to 60 inches; fine sand

**Garborg**

*Extent:* 5 percent of the unit

*Geomorphic component:* Flats and rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Loamy fine sand

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Somewhat poorly drained

*Parent material:* Glaciolacustrine deposits

*Flooding:* None

*Shallowest depth to wet zone:* 1.5 feet (April)

*Deepest depth to wet zone:* More than 6.7 feet (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 5.2 inches

*Content of organic matter in the upper 10 inches:* 4 percent

*Typical profile:*

Ap,A—0 to 12 inches; loamy fine sand

Bw1-Bw3—12 to 41 inches; loamy fine sand

BCK—41 to 59 inches; fine sand

C1,C2—59 to 80 inches; fine sand

**Hamar**

*Extent:* 3 percent of the unit

*Geomorphic component:* Swales and flats on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Loamy fine sand

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 4.9 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, September, November, December

*Deepest ponding:* 0.3 foot (April, May, June, October)

*Available water capacity to a depth of 60 inches:* 5 inches

*Content of organic matter in the upper 10 inches:* 6 percent

*Typical profile:*

A1,A2—0 to 12 inches; loamy fine sand

AC—12 to 17 inches; loamy fine sand

C1,C2—17 to 40 inches; fine sand

Ab—40 to 47 inches; loamy fine sand

Cg—47 to 60 inches; fine sand

**Radium**

*Extent:* 2 percent of the unit

*Geomorphic component:* Beach ridges

*Position on the landform:* Backslopes

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Loamy sand

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Moderately well drained

*Parent material:* Beach deposits

*Flooding:* None

*Shallowest depth to wet zone:* 3 feet (April)

*Deepest depth to wet zone:* More than 6.7 feet (July, August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 3.8 inches

*Content of organic matter in the upper 10 inches:* 2 percent

*Typical profile:*

Ap—0 to 14 inches; loamy sand

Bw1,Bw2—14 to 33 inches; sand

C1—33 to 43 inches; very gravelly coarse sand

C2-C4—43 to 80 inches; sand

### **Ulen**

*Extent:* 2 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Loamy fine sand

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Somewhat poorly drained

*Parent material:* Glaciolacustrine deposits

*Flooding:* None

*Shallowest depth to wet zone:* 2 feet (April)

*Deepest depth to wet zone:* More than 6.7 feet (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 5.4 inches

*Content of organic matter in the upper 10 inches:* 2.8 percent

*Typical profile:*

Ap—0 to 9 inches; loamy fine sand

Bk1,Bk2—9 to 42 inches; loamy fine sand

C—42 to 60 inches; fine sand

### **Maddock**

*Extent:* 1 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 1 to 6 percent

*Texture of the surface layer:* Loamy fine sand

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Well drained

*Parent material:* Glaciolacustrine deposits

*Flooding:* None

*Depth to wet zone:* More than 6.7 feet (all year)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 4.7 inches

*Content of organic matter in the upper 10 inches:* 1.5 percent

*Typical profile:*

A—0 to 10 inches; loamy fine sand

Bw—10 to 14 inches; fine sand

C1-C3—14 to 60 inches; fine sand

### **Major Uses of the Map Unit**

- Pasture, hayland

## **I48A—Radium loamy sand, 0 to 3 percent slopes**

### **Component Description**

#### **Radium and similar soils**

*Extent:* 75 percent of the unit

*Geomorphic component:* Beach ridges  
*Position on the landform:* Backslopes  
*Slope range:* 0 to 3 percent  
*Texture of the surface layer:* Loamy sand  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Beach deposits  
*Flooding:* None  
*Shallowest depth to wet zone:* 3 feet (April)  
*Deepest depth to wet zone:* More than 6.7 feet (July, August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 3.8 inches  
*Content of organic matter in the upper 10 inches:* 2 percent  
*Typical profile:*  
     Ap—0 to 14 inches; loamy sand  
     Bw1,Bw2—14 to 33 inches; sand  
     C1—33 to 43 inches; very gravelly coarse sand  
     C2-C4—43 to 80 inches; sand

### **Sandberg**

*Extent:* 7 percent of the unit  
*Geomorphic component:* Beach ridges  
*Position on the landform:* Shoulders, summits, and backslopes  
*Slope range:* 1 to 6 percent  
*Texture of the surface layer:* Loamy sand  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Excessively drained  
*Parent material:* Beach deposits  
*Flooding:* None  
*Depth to wet zone:* More than 6.7 feet (all year)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 3.1 inches  
*Content of organic matter in the upper 10 inches:* 2 percent  
*Typical profile:*  
     Ap,A—0 to 12 inches; loamy sand  
     Bw—12 to 19 inches; gravelly loamy coarse sand  
     Bk—19 to 29 inches; gravelly coarse sand  
     C—29 to 80 inches; gravelly coarse sand

### **Oylen**

*Extent:* 5 percent of the unit  
*Geomorphic component:* Beach ridges  
*Position on the landform:* Backslopes  
*Slope range:* 0 to 3 percent  
*Texture of the surface layer:* Sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Beach deposits  
*Flooding:* None  
*Shallowest depth to wet zone:* 3 feet (April)  
*Deepest depth to wet zone:* More than 6.7 feet (July, August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 4.9 inches  
*Content of organic matter in the upper 10 inches:* 3 percent

*Typical profile:*

- Ap—0 to 10 inches; sandy loam
- Bt—10 to 18 inches; sandy loam
- 2Bw—18 to 38 inches; sand
- 2C—38 to 80 inches; gravelly coarse sand

**Flaming**

- Extent:* 4 percent of the unit
- Geomorphic component:* Rises on lake plains
- Slope range:* 0 to 3 percent
- Texture of the surface layer:* Loamy fine sand
- Depth to restrictive feature:* Very deep (more than 60 inches)
- Drainage class:* Moderately well drained
- Parent material:* Glaciolacustrine deposits
- Flooding:* None
- Shallowest depth to wet zone:* 2.5 feet (April)
- Deepest depth to wet zone:* More than 6.7 feet (July, August)
- Ponding:* None
- Available water capacity to a depth of 60 inches:* 4.9 inches
- Content of organic matter in the upper 10 inches:* 3 percent

*Typical profile:*

- Ap,A—0 to 12 inches; loamy fine sand
- BA—12 to 17 inches; fine sand
- Bw—17 to 27 inches; fine sand
- C1,C2—27 to 60 inches; fine sand

**Garborg**

- Extent:* 3 percent of the unit
- Geomorphic component:* Rises and flats on lake plains
- Slope range:* 0 to 3 percent
- Texture of the surface layer:* Loamy fine sand
- Depth to restrictive feature:* Very deep (more than 60 inches)
- Drainage class:* Somewhat poorly drained
- Parent material:* Glaciolacustrine deposits
- Flooding:* None
- Shallowest depth to wet zone:* 1.5 feet (April)
- Deepest depth to wet zone:* More than 6.7 feet (August)
- Ponding:* None
- Available water capacity to a depth of 60 inches:* 5.2 inches
- Content of organic matter in the upper 10 inches:* 4 percent

*Typical profile:*

- Ap,A—0 to 12 inches; loamy fine sand
- Bw1-Bw3—12 to 41 inches; loamy fine sand
- BCK—41 to 59 inches; fine sand
- C1,C2—59 to 80 inches; fine sand

**Hangaard**

- Extent:* 3 percent of the unit
- Geomorphic component:* Flats and swales on beach plains
- Slope range:* 0 to 2 percent
- Texture of the surface layer:* Sandy loam
- Depth to restrictive feature:* Very deep (more than 60 inches)
- Drainage class:* Poorly drained
- Parent material:* Beach deposits
- Flooding:* None

*Shallowest depth to wet zone:* 0.3 foot (April)  
*Deepest depth to wet zone:* 3.3 feet (February, August)  
*Months when ponding does not occur:* January, February, March, July, August, September, October, November, December  
*Deepest ponding:* 0.3 foot (April, May)  
*Available water capacity to a depth of 60 inches:* 3 inches  
*Content of organic matter in the upper 10 inches:* 6 percent  
*Typical profile:*  
     Ap—0 to 10 inches; sandy loam  
     A—10 to 15 inches; loamy sand  
     Cg1-Cg5—15 to 80 inches; gravelly coarse sand

### **Hamar**

*Extent:* 2 percent of the unit  
*Geomorphic component:* Flats and swales on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Loamy fine sand  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 4.9 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, September, November, December  
*Deepest ponding:* 0.3 foot (April, May, June, October)  
*Available water capacity to a depth of 60 inches:* 5 inches  
*Content of organic matter in the upper 10 inches:* 6 percent  
*Typical profile:*  
     A1,A2—0 to 12 inches; loamy fine sand  
     AC—12 to 17 inches; loamy fine sand  
     C1,C2—17 to 40 inches; fine sand  
     Ab—40 to 47 inches; loamy fine sand  
     Cg—47 to 60 inches; fine sand

### **Poppleton**

*Extent:* 1 percent of the unit  
*Geomorphic component:* Rises on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Fine sand  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Glaciolacustrine deposits  
*Flooding:* None  
*Shallowest depth to wet zone:* 2.5 feet (April)  
*Deepest depth to wet zone:* More than 6.7 feet (July, August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 5 inches  
*Content of organic matter in the upper 10 inches:* 1 percent  
*Typical profile:*  
     Ap—0 to 6 inches; fine sand  
     E—6 to 9 inches; fine sand  
     Bw1-Bw4—9 to 40 inches; fine sand  
     C1,C2—40 to 60 inches; fine sand

### Major Uses of the Map Unit

- Cropland, pasture, hayland

## 149A—Rauville silty clay loam, 0 to 2 percent slopes

### Component Description

#### Rauville and similar soils

*Extent:* 80 percent of the unit

*Geomorphic component:* Oxbows on flood plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Silty clay loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Alluvium

*Months in which flooding does not occur:* January, February, December

*Highest frequency of flooding:* Very frequent (April, May)

*Shallowest depth to wet zone:* At the surface (March, April, May)

*Deepest depth to wet zone:* 1.6 feet (February, August)

*Shallowest ponding:* 0.5 foot (January, February, March, June, July, August, September, October, November, December)

*Deepest ponding:* 0.7 foot (April, May)

*Available water capacity to a depth of 60 inches:* 10.9 inches

*Content of organic matter in the upper 10 inches:* 6 percent

*Typical profile:*

A1,A2—0 to 27 inches; silty clay loam

Cg—27 to 45 inches; silty clay loam

2Cg—45 to 60 inches; stratified gravelly loamy sand to clay loam

#### Fluvaquents

*Extent:* 12 percent of the unit

*Geomorphic component:* Flats and swales on flood plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Alluvium

*Months in which flooding does not occur:* January, February, December

*Highest frequency of flooding:* Very frequent (April, May)

*Shallowest depth to wet zone:* At the surface (March, April, May)

*Deepest depth to wet zone:* 1.6 feet (February, August)

*Shallowest ponding:* 0.5 foot (January, February, March, June, July, August, September, October, November, December)

*Deepest ponding:* 0.7 foot (April, May)

*Available water capacity to a depth of 60 inches:* 8.1 inches

*Content of organic matter in the upper 10 inches:* 5 percent

*Typical profile:*

A—0 to 16 inches; fine sandy loam

Cg—16 to 80 inches; stratified loamy sand to silt loam

#### Water

*Extent:* 5 percent of the unit

#### Lamoure

*Extent:* 3 percent of the unit

*Geomorphic component:* Flats on flood plains  
*Slope range:* 0 to 1 percent  
*Texture of the surface layer:* Silty clay loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Alluvium  
*Months in which flooding does not occur:* January, February, November, December  
*Highest frequency of flooding:* Frequent (March, April, May, June, July, August, September, October)  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 3.8 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, December  
*Deepest ponding:* 0.3 foot (April, May, June)  
*Available water capacity to a depth of 60 inches:* 11.4 inches  
*Content of organic matter in the upper 10 inches:* 6 percent  
*Typical profile:*  
     A1,A2—0 to 27 inches; silty clay loam  
     Cg1,Cg2—27 to 43 inches; silt loam  
     Ab—43 to 52 inches; loam  
     C'g—52 to 60 inches; stratified loamy sand to silt loam

#### **Major Uses of the Map Unit**

- Wetland wildlife habitat

### **I50A—Reiner fine sandy loam, 0 to 3 percent slopes**

#### **Component Description**

##### **Reiner and similar soils**

*Extent:* 70 percent of the unit  
*Geomorphic component:* Rises on lake plains  
*Slope range:* 0 to 3 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Till  
*Flooding:* None  
*Shallowest depth to wet zone:* 2.5 feet (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 10.2 inches  
*Content of organic matter in the upper 10 inches:* 2.3 percent  
*Typical profile:*  
     Ap—0 to 7 inches; fine sandy loam  
     Bt—7 to 17 inches; clay loam  
     Bw,Bk1,Bk2—17 to 35 inches; loam  
     C1-C3—35 to 80 inches; loam

##### **Smiley**

*Extent:* 12 percent of the unit  
*Geomorphic component:* Swales and flats on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 3.8 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, December

*Deepest ponding:* 0.3 foot (April, May, June, September, October, November)

*Available water capacity to a depth of 60 inches:* 10.8 inches

*Content of organic matter in the upper 10 inches:* 5 percent

*Typical profile:*

Ap—0 to 12 inches; loam

Btg—12 to 19 inches; clay loam

Bkg1-Bkg3—19 to 42 inches; loam

Cg1,Cg2—42 to 80 inches; loam

### **Reiner, very cobbly**

*Extent:* 7 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Moderately well drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* 2.5 feet (April)

*Deepest depth to wet zone:* 6.7 feet (transitory) (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 10.2 inches

*Content of organic matter in the upper 10 inches:* 2.3 percent

*Typical profile:*

Ap—0 to 7 inches; fine sandy loam

Bt—7 to 17 inches; clay loam

Bw,Bk1,Bk2—17 to 35 inches; loam

C1-C3—35 to 80 inches; loam

### **Linveldt**

*Extent:* 5 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Moderately well drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 2.5 feet (April)

*Deepest depth to wet zone:* 6.7 feet (transitory) (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 8.9 inches

*Content of organic matter in the upper 10 inches:* 2.8 percent

*Typical profile:*

Ap—0 to 9 inches; fine sandy loam

Bt—9 to 16 inches; loam

2Bw1,2Bw2—16 to 29 inches; sand

3Bk—29 to 45 inches; loam  
 3C1-3C3—45 to 80 inches; loam

**Eckvoll**

*Extent:* 3 percent of the unit  
*Geomorphic component:* Rises on lake plains  
*Slope range:* 0 to 3 percent  
*Texture of the surface layer:* Loamy fine sand  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 2.5 feet (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 8.3 inches  
*Content of organic matter in the upper 10 inches:* 1.9 percent  
*Typical profile:*  
 Ap—0 to 9 inches; loamy fine sand  
 E1,E2—9 to 25 inches; fine sand  
 2Bt—25 to 32 inches; sandy clay loam  
 2BCk-2C1,2C2—32 to 80 inches; loam

**Kratka**

*Extent:* 3 percent of the unit  
*Geomorphic component:* Swales and flats on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 4.1 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, September, December  
*Deepest ponding:* 0.3 foot (April, May)  
*Available water capacity to a depth of 60 inches:* 9.1 inches  
*Content of organic matter in the upper 10 inches:* 6 percent  
*Typical profile:*  
 Ap,A—0 to 11 inches; fine sandy loam  
 Bg1,Bg2—11 to 18 inches; loamy fine sand  
 Cg1—18 to 25 inches; fine sand  
 2Cg2-2Cg4—25 to 80 inches; loam

**Major Uses of the Map Unit**

- Cropland, pasture, hayland

**I51A—Reiner loamy fine sand, 0 to 3 percent slopes****Component Description****Reiner and similar soils**

*Extent:* 65 percent of the unit  
*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent  
*Texture of the surface layer:* Loamy fine sand  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Till  
*Flooding:* None  
*Shallowest depth to wet zone:* 2.5 feet (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 9.7 inches  
*Content of organic matter in the upper 10 inches:* 1.6 percent  
*Typical profile:*  
     Ap—0 to 7 inches; loamy fine sand  
     Bt—7 to 17 inches; clay loam  
     Bw,Bk1,Bk2—17 to 35 inches; loam  
     C1-C3—35 to 80 inches; loam

### **Smiley**

*Extent:* 9 percent of the unit  
*Geomorphic component:* Flats and swales on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 3.8 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, December  
*Deepest ponding:* 0.3 foot (April, May, June, September, October, November)  
*Available water capacity to a depth of 60 inches:* 10.8 inches  
*Content of organic matter in the upper 10 inches:* 5 percent  
*Typical profile:*  
     Ap—0 to 12 inches; loam  
     Btg—12 to 19 inches; clay loam  
     Bkg1-Bkg3—19 to 42 inches; loam  
     Cg1,Cg2—42 to 80 inches; loam

### **Reiner fine sandy loam**

*Extent:* 8 percent of the unit  
*Geomorphic component:* Rises on lake plains  
*Slope range:* 0 to 3 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Till  
*Flooding:* None  
*Shallowest depth to wet zone:* 2.5 feet (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 10.2 inches  
*Content of organic matter in the upper 10 inches:* 2.3 percent  
*Typical profile:*  
     Ap—0 to 7 inches; fine sandy loam

Bt—7 to 17 inches; clay loam  
 Bw,Bk1,Bk2—17 to 35 inches; loam  
 C1-C3—35 to 80 inches; loam

### **Linveldt**

*Extent:* 7 percent of the unit  
*Geomorphic component:* Rises on lake plains  
*Slope range:* 0 to 3 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 2.5 feet (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 8.9 inches  
*Content of organic matter in the upper 10 inches:* 2.8 percent  
*Typical profile:*  
 Ap—0 to 9 inches; fine sandy loam  
 Bt—9 to 16 inches; loam  
 2Bw1,2Bw2—16 to 29 inches; sand  
 3Bk—29 to 45 inches; loam  
 3C1-3C3—45 to 80 inches; loam

### **Kratka**

*Extent:* 5 percent of the unit  
*Geomorphic component:* Flats and swales on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 4.1 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, September, December  
*Deepest ponding:* 0.3 foot (April, May)  
*Available water capacity to a depth of 60 inches:* 9.1 inches  
*Content of organic matter in the upper 10 inches:* 6 percent  
*Typical profile:*  
 Ap,A—0 to 11 inches; fine sandy loam  
 Bg1,Bg2—11 to 18 inches; loamy fine sand  
 Cg1—18 to 25 inches; fine sand  
 2Cg2-2Cg4—25 to 80 inches; loam

### **Eckvoll**

*Extent:* 3 percent of the unit  
*Geomorphic component:* Rises on lake plains  
*Slope range:* 0 to 3 percent  
*Texture of the surface layer:* Loamy fine sand  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None

*Shallowest depth to wet zone:* 2.5 feet (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 8.3 inches  
*Content of organic matter in the upper 10 inches:* 1.9 percent  
*Typical profile:*  
     Ap—0 to 9 inches; loamy fine sand  
     E1,E2—9 to 25 inches; fine sand  
     2Bt—25 to 32 inches; sandy clay loam  
     2BCk-2C1,2C2—32 to 80 inches; loam

### **Reiner, very cobbly**

*Extent:* 3 percent of the unit  
*Geomorphic component:* Rises on lake plains  
*Slope range:* 0 to 3 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Till  
*Flooding:* None  
*Shallowest depth to wet zone:* 2.5 feet (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 10.2 inches  
*Content of organic matter in the upper 10 inches:* 2.3 percent  
*Typical profile:*  
     Ap—0 to 7 inches; fine sandy loam  
     Bt—7 to 17 inches; clay loam  
     Bw,Bk1,Bk2—17 to 35 inches; loam  
     C1-C3—35 to 80 inches; loam

### **Major Uses of the Map Unit**

- Cropland, pasture, hayland

## **I52A—Reis-Clearwater complex, 0 to 2 percent slopes**

### **Component Description**

#### **Reis and similar soils**

*Extent:* 55 percent of the unit  
*Geomorphic component:* Rises and flats on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Clay  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 3.6 feet (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 8.3 inches  
*Content of organic matter in the upper 10 inches:* 4.7 percent  
*Typical profile:*  
     Ap—0 to 9 inches; clay  
     A/Bk—9 to 17 inches; clay

Bkss1,Bkss2—17 to 33 inches; clay

Bkg—33 to 42 inches; clay

Cg1,Cg2—42 to 60 inches; clay

C—60 to 80 inches; clay

**Clearwater and similar soils**

*Extent:* 30 percent of the unit

*Geomorphic component:* Swales and flats on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Clay

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (April)

*Deepest depth to wet zone:* 3 feet (August)

*Months when ponding does not occur:* January, February, March, December

*Deepest ponding:* 0.3 foot (April, May, June, November)

*Available water capacity to a depth of 60 inches:* 8.2 inches

*Content of organic matter in the upper 10 inches:* 4.2 percent

*Typical profile:*

Ap—0 to 8 inches; clay

Bss1,Bss2—8 to 35 inches; clay

Cg1,Cg2—35 to 80 inches; clay

**Clearwater, very cobbly**

*Extent:* 5 percent of the unit

*Geomorphic component:* Flats and swales on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Clay

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (April)

*Deepest depth to wet zone:* 3 feet (August)

*Months when ponding does not occur:* January, February, March, December

*Deepest ponding:* 0.3 foot (April, May, June, November)

*Available water capacity to a depth of 60 inches:* 8.2 inches

*Content of organic matter in the upper 10 inches:* 4.2 percent

*Typical profile:*

Ap—0 to 8 inches; clay

Bss1,Bss2—8 to 35 inches; clay

Cg1,Cg2—35 to 80 inches; clay

**Clearwater, depressional**

*Extent:* 3 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Mucky clay loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May)

*Deepest depth to wet zone:* 1.6 feet (February, August)

*Ponding depth:* 0.5 foot (all year)  
*Available water capacity to a depth of 60 inches:* 9 inches  
*Content of organic matter in the upper 10 inches:* 8.4 percent  
*Typical profile:*

Ap—0 to 8 inches; mucky clay loam  
 Bss1,Bss2—8 to 35 inches; clay  
 Cg1,Cg2—35 to 80 inches; clay

### **Espelie**

*Extent:* 3 percent of the unit  
*Geomorphic component:* Swales and flats on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 3.8 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, December

*Deepest ponding:* 0.3 foot (April, May, June)  
*Available water capacity to a depth of 60 inches:* 7.1 inches  
*Content of organic matter in the upper 10 inches:* 5.6 percent  
*Typical profile:*

Ap—0 to 9 inches; fine sandy loam  
 Bw1,Bw2—9 to 24 inches; fine sand  
 2Bg-2Cg—24 to 80 inches; clay

### **Hattie**

*Extent:* 3 percent of the unit  
*Geomorphic component:* Escarpments on lake plains  
*Position on the landform:* Summits  
*Slope range:* 1 to 3 percent  
*Texture of the surface layer:* Clay  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Till  
*Flooding:* None  
*Shallowest depth to wet zone:* 2.1 feet (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (February)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 7.7 inches  
*Content of organic matter in the upper 10 inches:* 2.5 percent  
*Typical profile:*

Ap—0 to 8 inches; clay  
 Bk—8 to 22 inches; silty clay  
 C—22 to 80 inches; clay

### **Wyandotte**

*Extent:* 1 percent of the unit  
*Geomorphic component:* Swales and flats on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Clay loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 3.8 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, September, November, December

*Deepest ponding:* 0.3 foot (April, May, June)

*Available water capacity to a depth of 60 inches:* 6.5 inches

*Content of organic matter in the upper 10 inches:* 4.1 percent

*Typical profile:*

Ap—0 to 8 inches; clay loam

Bk—8 to 15 inches; sandy clay loam

2C1-2C3—15 to 34 inches; very gravelly loamy coarse sand

3Cg—34 to 60 inches; clay

### **Major Uses of the Map Unit**

- Cropland

## **I53A—Roliss loam, 0 to 2 percent slopes**

### **Component Description**

#### **Roliss and similar soils**

*Extent:* 75 percent of the unit

*Geomorphic component:* Swales and flats on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 3.8 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, December

*Deepest ponding:* 0.3 foot (April, May, June, September, October, November)

*Available water capacity to a depth of 60 inches:* 10.7 inches

*Content of organic matter in the upper 10 inches:* 5 percent

*Typical profile:*

Ap,A—0 to 14 inches; loam

Bg—14 to 20 inches; loam

Cg1-Cg4—20 to 80 inches; loam

#### **Kratka**

*Extent:* 8 percent of the unit

*Geomorphic component:* Flats and swales on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 4.1 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, September, December

*Deepest ponding:* 0.3 foot (April, May)

*Available water capacity to a depth of 60 inches:* 9.1 inches

*Content of organic matter in the upper 10 inches:* 6 percent

*Typical profile:*

Ap,A—0 to 11 inches; fine sandy loam

Bg1,Bg2—11 to 18 inches; loamy fine sand

Cg1—18 to 25 inches; fine sand

2Cg2-2Cg4—25 to 80 inches; loam

### **Roliss, very cobbly**

*Extent:* 7 percent of the unit

*Geomorphic component:* Swales and flats on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 3.8 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, December

*Deepest ponding:* 0.3 foot (April, May, June, September, October, November)

*Available water capacity to a depth of 60 inches:* 10.7 inches

*Content of organic matter in the upper 10 inches:* 5 percent

*Typical profile:*

Ap,A—0 to 14 inches; loam

Bg—14 to 20 inches; loam

Cg1-Cg4—20 to 80 inches; loam

### **Kittson**

*Extent:* 5 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Moderately well drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 2.5 feet (April)

*Deepest depth to wet zone:* 6.7 feet (transitory) (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 10.5 inches

*Content of organic matter in the upper 10 inches:* 3 percent

*Typical profile:*

Ap—0 to 10 inches; loam

Bw—10 to 17 inches; fine sandy loam

2Bk1,2Bk2—17 to 36 inches; loam

2C—36 to 60 inches; loam

### **Roliss, depressional**

*Extent:* 3 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent  
*Texture of the surface layer:* Loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Very poorly drained  
*Parent material:* Till  
*Flooding:* None  
*Shallowest depth to wet zone:* At the surface (March, April, May)  
*Deepest depth to wet zone:* 2.5 feet (February)  
*Shallowest ponding:* 0.3 foot (July, August, September, October)  
*Deepest ponding:* 0.5 foot (January, February, March, April, May, June, November, December)  
*Available water capacity to a depth of 60 inches:* 10.9 inches  
*Content of organic matter in the upper 10 inches:* 10 percent  
*Typical profile:*  
     Ap,A—0 to 14 inches; loam  
     Bg—14 to 20 inches; loam  
     Cg1-Cg4—20 to 80 inches; loam

### **Smiley**

*Extent:* 2 percent of the unit  
*Geomorphic component:* Swales and flats on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 3.8 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, December  
*Deepest ponding:* 0.3 foot (April, May, June, September, October, November)  
*Available water capacity to a depth of 60 inches:* 10.8 inches  
*Content of organic matter in the upper 10 inches:* 5 percent  
*Typical profile:*  
     Ap—0 to 12 inches; loam  
     Btg—12 to 19 inches; clay loam  
     Bkg1-Bkg3—19 to 42 inches; loam  
     Cg1,Cg2—42 to 80 inches; loam

### **Major Uses of the Map Unit**

- Cropland, pasture, hayland

## **I54A—Roliss loam, depressional, 0 to 1 percent slopes**

### **Component Description**

#### **Roliss, depressional, and similar soils**

*Extent:* 80 percent of the unit  
*Geomorphic component:* Depressions on lake plains  
*Slope range:* 0 to 1 percent  
*Texture of the surface layer:* Loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Very poorly drained  
*Parent material:* Till

*Flooding:* None*Shallowest depth to wet zone:* At the surface (March, April, May)*Deepest depth to wet zone:* 2.5 feet (February)*Shallowest ponding:* 0.3 foot (July, August, September, October)*Deepest ponding:* 0.5 foot (January, February, March, April, May, June, November, December)*Available water capacity to a depth of 60 inches:* 10.9 inches*Content of organic matter in the upper 10 inches:* 10 percent*Typical profile:*

Ap,A—0 to 14 inches; loam

Bg—14 to 20 inches; loam

Cg1-Cg4—20 to 80 inches; loam

**Roliss***Extent:* 12 percent of the unit*Geomorphic component:* Flats and swales on lake plains*Slope range:* 0 to 2 percent*Texture of the surface layer:* Loam*Depth to restrictive feature:* Very deep (more than 60 inches)*Drainage class:* Poorly drained*Parent material:* Till*Flooding:* None*Shallowest depth to wet zone:* 0.5 foot (April)*Deepest depth to wet zone:* 3.8 feet (August)*Months when ponding does not occur:* January, February, March, July, August, December*Deepest ponding:* 0.3 foot (April, May, June, September, October, November)*Available water capacity to a depth of 60 inches:* 10.7 inches*Content of organic matter in the upper 10 inches:* 5 percent*Typical profile:*

Ap,A—0 to 14 inches; loam

Bg—14 to 20 inches; loam

Cg1-Cg4—20 to 80 inches; loam

**Hamre***Extent:* 5 percent of the unit*Geomorphic component:* Depressions on lake plains*Slope range:* 0 to 1 percent*Texture of the surface layer:* Muck*Depth to restrictive feature:* Very deep (more than 60 inches)*Drainage class:* Very poorly drained*Flooding:* None*Shallowest depth to wet zone:* At the surface (March, April, May)*Deepest depth to wet zone:* 2.5 feet (February)*Shallowest ponding:* 0.3 foot (July, August, September)*Deepest ponding:* 0.5 foot (January, February, March, April, May, June, October, November, December)*Available water capacity to a depth of 60 inches:* 13.3 inches*Content of organic matter in the upper 10 inches:* 85 percent*Typical profile:*

Oa—0 to 13 inches; muck

A—13 to 18 inches; loam

Bg1,Bg2—18 to 71 inches; loam

Cg—71 to 80 inches; loam

**Kratka**

*Extent:* 3 percent of the unit

*Geomorphic component:* Swales and flats on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 4.1 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, September, December

*Deepest ponding:* 0.3 foot (April, May)

*Available water capacity to a depth of 60 inches:* 9.1 inches

*Content of organic matter in the upper 10 inches:* 6 percent

*Typical profile:*

Ap,A—0 to 11 inches; fine sandy loam

Bg1,Bg2—11 to 18 inches; loamy fine sand

Cg1—18 to 25 inches; fine sand

2Cg2-2Cg4—25 to 80 inches; loam

**Major Uses of the Map Unit**

- Pasture, hayland, wildlife habitat

**I55A—Rosewood fine sandy loam, 0 to 2 percent slopes****Component Description****Rosewood and similar soils**

*Extent:* 75 percent of the unit

*Geomorphic component:* Swales and flats on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 4.9 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, September, November, December

*Deepest ponding:* 0.3 foot (April, May, June, October)

*Available water capacity to a depth of 60 inches:* 5.6 inches

*Content of organic matter in the upper 10 inches:* 5 percent

*Typical profile:*

Ap—0 to 8 inches; fine sandy loam

Bkg1,Bkg2—8 to 18 inches; fine sandy loam

Cg1-Cg3—18 to 80 inches; fine sand

**Ulen**

*Extent:* 10 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Glaciolacustrine deposits  
*Flooding:* None  
*Shallowest depth to wet zone:* 2 feet (April)  
*Deepest depth to wet zone:* More than 6.7 feet (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 5.8 inches  
*Content of organic matter in the upper 10 inches:* 2.8 percent  
*Typical profile:*  
     Ap—0 to 9 inches; fine sandy loam  
     Bk1,Bk2—9 to 42 inches; loamy fine sand  
     C—42 to 60 inches; fine sand

### **Hamar**

*Extent:* 6 percent of the unit  
*Geomorphic component:* Swales and flats on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Loamy fine sand  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 4.9 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, September, November, December  
*Deepest ponding:* 0.3 foot (April, May, June, October)  
*Available water capacity to a depth of 60 inches:* 5 inches  
*Content of organic matter in the upper 10 inches:* 6 percent  
*Typical profile:*  
     A1,A2—0 to 12 inches; loamy fine sand  
     AC—12 to 17 inches; loamy fine sand  
     C1,C2—17 to 40 inches; fine sand  
     Ab—40 to 47 inches; loamy fine sand  
     Cg—47 to 60 inches; fine sand

### **Rosewood, depressional**

*Extent:* 3 percent of the unit  
*Geomorphic component:* Depressions on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Very poorly drained  
*Parent material:* Glaciolacustrine deposits  
*Flooding:* None  
*Shallowest depth to wet zone:* At the surface (April)  
*Deepest depth to wet zone:* 3 feet (February, August)  
*Shallowest ponding:* 0.3 foot (July, August, September, October)  
*Deepest ponding:* 0.5 foot (January, February, March, April, May, June, November, December)  
*Available water capacity to a depth of 60 inches:* 6.2 inches  
*Content of organic matter in the upper 10 inches:* 8.2 percent

*Typical profile:*

- Ap—0 to 8 inches; fine sandy loam
- Bkg1,Bkg2—8 to 18 inches; fine sandy loam
- Cg1-Cg3—18 to 80 inches; fine sand

**Syrene**

- Extent:* 3 percent of the unit
- Geomorphic component:* Swales and flats on beach plains
- Slope range:* 0 to 2 percent
- Texture of the surface layer:* Sandy loam
- Depth to restrictive feature:* Very deep (more than 60 inches)
- Drainage class:* Poorly drained
- Parent material:* Beach deposits
- Flooding:* None
- Shallowest depth to wet zone:* 0.3 foot (April)
- Deepest depth to wet zone:* 3.3 feet (February, August)
- Months when ponding does not occur:* January, February, March, July, August, September, October, November, December
- Deepest ponding:* 0.3 foot (April, May)
- Available water capacity to a depth of 60 inches:* 3.8 inches
- Content of organic matter in the upper 10 inches:* 5.6 percent
- Typical profile:*
  - Ap—0 to 9 inches; sandy loam
  - Bkg1—9 to 17 inches; sandy loam
  - 2Bkg2—17 to 27 inches; stratified loamy fine sand to gravelly coarse sand
  - 2Cg—27 to 60 inches; stratified loamy fine sand to gravelly coarse sand

**Karlsruhe**

- Extent:* 1 percent of the unit
- Geomorphic component:* Rises on beach plains
- Slope range:* 0 to 3 percent
- Texture of the surface layer:* Sandy loam
- Depth to restrictive feature:* Very deep (more than 60 inches)
- Drainage class:* Somewhat poorly drained
- Parent material:* Beach deposits
- Flooding:* None
- Shallowest depth to wet zone:* 2 feet (April)
- Deepest depth to wet zone:* 6.7 feet (transitory) (August)
- Ponding:* None
- Available water capacity to a depth of 60 inches:* 5.2 inches
- Content of organic matter in the upper 10 inches:* 4 percent
- Typical profile:*
  - A,Ak,ABk—0 to 15 inches; sandy loam
  - Bk,Bck—15 to 30 inches; loamy sand
  - C1,C2—30 to 60 inches; coarse sand

**Strathcona**

- Extent:* 1 percent of the unit
- Geomorphic component:* Flats and swales on lake plains
- Slope range:* 0 to 2 percent
- Texture of the surface layer:* Fine sandy loam
- Depth to restrictive feature:* Very deep (more than 60 inches)
- Drainage class:* Poorly drained
- Parent material:* Glaciolacustrine deposits over till
- Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 4.1 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, September, December  
*Deepest ponding:* 0.3 foot (April, May)  
*Available water capacity to a depth of 60 inches:* 9 inches  
*Content of organic matter in the upper 10 inches:* 6 percent  
*Typical profile:*  
     Ap—0 to 10 inches; fine sandy loam  
     Bkg—10 to 17 inches; fine sandy loam, loamy fine sand  
     Cg1—17 to 28 inches; fine sand  
     2Cg2,2Cg3—28 to 80 inches; loam

### **Thiefriver**

*Extent:* 1 percent of the unit  
*Geomorphic component:* Swales and flats on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 3.8 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, December  
*Deepest ponding:* 0.3 foot (April, May, June)  
*Available water capacity to a depth of 60 inches:* 7.5 inches  
*Content of organic matter in the upper 10 inches:* 6 percent  
*Typical profile:*  
     Ap,A—0 to 12 inches; fine sandy loam  
     Bkg1-Bkg3—12 to 23 inches; loamy fine sand  
     Cg1—23 to 32 inches; fine sand  
     2Cg2,2Cg3—32 to 80 inches; clay

### **Major Uses of the Map Unit**

- Cropland, pasture, hayland

## **I56A—Rosewood-Venlo complex, 0 to 1 percent slopes**

### **Component Description**

#### **Rosewood and similar soils**

*Extent:* 50 percent of the unit  
*Geomorphic component:* Swales and flats on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 4.9 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, September, November, December

*Deepest ponding:* 0.3 foot (April, May, June, October)  
*Available water capacity to a depth of 60 inches:* 5.6 inches  
*Content of organic matter in the upper 10 inches:* 5 percent  
*Typical profile:*

Ap—0 to 8 inches; fine sandy loam  
 Bkg1,Bkg2—8 to 18 inches; fine sandy loam  
 Cg1-Cg3—18 to 80 inches; fine sand

#### **Venlo and similar soils**

*Extent:* 40 percent of the unit  
*Geomorphic component:* Depressions on lake plains  
*Slope range:* 0 to 1 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Very poorly drained  
*Parent material:* Glaciolacustrine deposits  
*Flooding:* None  
*Shallowest depth to wet zone:* At the surface (April)  
*Deepest depth to wet zone:* 3 feet (February, August)  
*Shallowest ponding:* 0.3 foot (July, August, September, October)  
*Deepest ponding:* 0.5 foot (January, February, March, April, May, June, November, December)  
*Available water capacity to a depth of 60 inches:* 5.4 inches  
*Content of organic matter in the upper 10 inches:* 10 percent  
*Typical profile:*

A—0 to 13 inches; fine sandy loam  
 Cg1,Cg2—13 to 60 inches; fine sand

#### **Deerwood**

*Extent:* 3 percent of the unit  
*Geomorphic component:* Depressions on lake plains  
*Slope range:* 0 to 1 percent  
*Texture of the surface layer:* Muck  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Very poorly drained  
*Parent material:* Organic material over glaciolacustrine deposits  
*Flooding:* None  
*Shallowest depth to wet zone:* At the surface (March, April, May)  
*Deepest depth to wet zone:* 2.5 feet (February)  
*Shallowest ponding:* 0.3 foot (July, August, September)  
*Deepest ponding:* 0.5 foot (January, February, March, April, May, June, October, November, December)  
*Available water capacity to a depth of 60 inches:* 7.1 inches  
*Content of organic matter in the upper 10 inches:* 75 percent  
*Typical profile:*

Oa—0 to 10 inches; muck  
 A—10 to 12 inches; loamy sand  
 Cg1,Cg2—12 to 60 inches; sand

#### **Syrene**

*Extent:* 3 percent of the unit  
*Geomorphic component:* Swales and flats on beach plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained

*Parent material:* Beach deposits

*Flooding:* None

*Shallowest depth to wet zone:* 0.3 foot (April)

*Deepest depth to wet zone:* 3.3 feet (February, August)

*Months when ponding does not occur:* January, February, March, July, August, September, October, November, December

*Deepest ponding:* 0.3 foot (April, May)

*Available water capacity to a depth of 60 inches:* 3.8 inches

*Content of organic matter in the upper 10 inches:* 5.6 percent

*Typical profile:*

Ap—0 to 9 inches; sandy loam

Bkg1—9 to 17 inches; sandy loam

2Bkg2—17 to 27 inches; stratified loamy fine sand to gravelly coarse sand

2Cg—27 to 60 inches; stratified loamy fine sand to gravelly coarse sand

### **Ulen**

*Extent:* 2 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Loamy fine sand

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Somewhat poorly drained

*Parent material:* Glaciolacustrine deposits

*Flooding:* None

*Shallowest depth to wet zone:* 2 feet (April)

*Deepest depth to wet zone:* More than 6.7 feet (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 5.4 inches

*Content of organic matter in the upper 10 inches:* 2.8 percent

*Typical profile:*

Ap—0 to 9 inches; loamy fine sand

Bk1,Bk2—9 to 42 inches; loamy fine sand

C—42 to 60 inches; fine sand

### **Strathcona**

*Extent:* 1 percent of the unit

*Geomorphic component:* Flats and swales on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 4.1 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, September, December

*Deepest ponding:* 0.3 foot (April, May)

*Available water capacity to a depth of 60 inches:* 9 inches

*Content of organic matter in the upper 10 inches:* 6 percent

*Typical profile:*

Ap—0 to 10 inches; fine sandy loam

Bkg—10 to 17 inches; fine sandy loam

Cg1—17 to 28 inches; fine sand

2Cg2,2Cg3—28 to 80 inches; loam

**Thief river**

*Extent:* 1 percent of the unit

*Geomorphic component:* Swales and flats on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 3.8 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, December

*Deepest ponding:* 0.3 foot (April, May, June)

*Available water capacity to a depth of 60 inches:* 7.5 inches

*Content of organic matter in the upper 10 inches:* 6 percent

*Typical profile:*

Ap,A—0 to 12 inches; fine sandy loam

Bkg1-Bkg3—12 to 23 inches; loamy fine sand

Cg1—23 to 32 inches; fine sand

2Cg2,2Cg3—32 to 80 inches; clay

**Major Uses of the Map Unit**

- Pasture, hayland, wildlife habitat

**I57B—Sandberg-Radium complex, 1 to 6 percent slopes****Component Description****Sandberg and similar soils**

*Extent:* 50 percent of the unit

*Geomorphic component:* Beach ridges

*Position on the landform:* Backslopes, summits, and shoulders

*Slope range:* 1 to 6 percent

*Texture of the surface layer:* Loamy sand

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Excessively drained

*Parent material:* Beach deposits

*Flooding:* None

*Depth to wet zone:* More than 6.7 feet (all year)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 3.1 inches

*Content of organic matter in the upper 10 inches:* 2 percent

*Typical profile:*

Ap,A—0 to 12 inches; loamy sand

Bw—12 to 19 inches; gravelly loamy coarse sand

Bk—19 to 29 inches; gravelly coarse sand

C—29 to 80 inches; gravelly coarse sand

**Radium and similar soils**

*Extent:* 25 percent of the unit

*Geomorphic component:* Beach ridges

*Position on the landform:* Backslopes

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Loamy sand

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Moderately well drained

*Parent material:* Beach deposits

*Flooding:* None

*Shallowest depth to wet zone:* 3 feet (April)

*Deepest depth to wet zone:* More than 6.7 feet (July, August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 3.8 inches

*Content of organic matter in the upper 10 inches:* 2 percent

*Typical profile:*

Ap—0 to 14 inches; loamy sand

Bw1,Bw2—14 to 33 inches; sand

C1—33 to 43 inches; very gravelly coarse sand

C2-C4—43 to 80 inches; sand

### **Sioux**

*Extent:* 8 percent of the unit

*Geomorphic component:* Beach ridges

*Position on the landform:* Shoulders and summits

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Excessively drained

*Parent material:* Beach deposits

*Flooding:* None

*Depth to wet zone:* More than 6.7 feet (all year)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 3.6 inches

*Content of organic matter in the upper 10 inches:* 1.4 percent

*Typical profile:*

A—0 to 5 inches; sandy loam

AC—5 to 8 inches; gravelly sandy loam

C—8 to 60 inches; very gravelly sand

### **Oylen**

*Extent:* 7 percent of the unit

*Geomorphic component:* Beach ridges

*Position on the landform:* Backslopes

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Moderately well drained

*Parent material:* Beach deposits

*Flooding:* None

*Shallowest depth to wet zone:* 3 feet (April)

*Deepest depth to wet zone:* More than 6.7 feet (July, August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 4.9 inches

*Content of organic matter in the upper 10 inches:* 3 percent

*Typical profile:*

Ap—0 to 10 inches; sandy loam

Bt—10 to 18 inches; sandy loam

2Bw—18 to 38 inches; sand

2C—38 to 80 inches; gravelly coarse sand

**Flaming**

*Extent:* 5 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Loamy fine sand

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Moderately well drained

*Parent material:* Glaciolacustrine deposits

*Flooding:* None

*Shallowest depth to wet zone:* 2.5 feet (April)

*Deepest depth to wet zone:* More than 6.7 feet (July, August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 4.9 inches

*Content of organic matter in the upper 10 inches:* 3 percent

*Typical profile:*

Ap,A—0 to 12 inches; loamy fine sand

BA—12 to 17 inches; fine sand

Bw—17 to 27 inches; fine sand

C1,C2—27 to 60 inches; fine sand

**Garborg**

*Extent:* 5 percent of the unit

*Geomorphic component:* Flats and rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Loamy fine sand

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Somewhat poorly drained

*Parent material:* Glaciolacustrine deposits

*Flooding:* None

*Shallowest depth to wet zone:* 1.5 feet (April)

*Deepest depth to wet zone:* More than 6.7 feet (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 5.2 inches

*Content of organic matter in the upper 10 inches:* 4 percent

*Typical profile:*

Ap,A—0 to 12 inches; loamy fine sand

Bw1-Bw3—12 to 41 inches; loamy fine sand

BCK—41 to 59 inches; fine sand

C1,C2—59 to 80 inches; fine sand

**Major Uses of the Map Unit**

- Pasture, hayland

**I58A—Seelyeville muck, 0 to 1 percent slopes****Component Description****Seelyeville and similar soils**

*Extent:* 90 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Muck

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Organic material

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May)

*Deepest depth to wet zone:* 1.6 feet (February, August)

*Shallowest ponding:* 0.3 foot (January, February, July, August, September, October, November, December)

*Deepest ponding:* 0.5 foot (March, April, May, June)

*Available water capacity to a depth of 60 inches:* 25.1 inches

*Content of organic matter in the upper 10 inches:* 90 percent

*Typical profile:*

Oa1—0 to 10 inches; muck

Oa2-Oa5—10 to 80 inches; muck

### **Cathro**

*Extent:* 0 to 10 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Muck

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Organic material over till

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May, June)

*Deepest depth to wet zone:* 2.1 feet (February)

*Shallowest ponding:* 0.3 foot (January, February, July, August, September, October, November, December)

*Deepest ponding:* 0.5 foot (March, April, May, June)

*Available water capacity to a depth of 60 inches:* 15.9 inches

*Content of organic matter in the upper 10 inches:* 85 percent

*Typical profile:*

Oa1,Oa2—0 to 11 inches; muck

Oa3—11 to 23 inches; muck

Cg—23 to 60 inches; loam

### **Dora**

*Extent:* 0 to 10 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Mucky peat

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Organic material over glaciolacustrine deposits or till

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May, June)

*Deepest depth to wet zone:* 2.1 feet (February)

*Shallowest ponding:* 0.3 foot (January, February, July, August, September, October, November, December)

*Deepest ponding:* 0.5 foot (March, April, May, June)

*Available water capacity to a depth of 60 inches:* 19.1 inches

*Content of organic matter in the upper 10 inches:* 90 percent

*Typical profile:*

Oe—0 to 12 inches; mucky peat

Oa1,Oa2—12 to 32 inches; muck

A—32 to 36 inches; mucky silty clay loam

Cg1-Cg3—36 to 60 inches; silty clay

**Markey**

*Extent:* 0 to 10 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Muck

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Organic material over glaciolacustrine deposits

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May, June)

*Deepest depth to wet zone:* 2.1 feet (February)

*Shallowest ponding:* 0.3 foot (January, February, July, August, September, October, November, December)

*Deepest ponding:* 0.5 foot (March, April, May, June)

*Available water capacity to a depth of 60 inches:* 15.1 inches

*Content of organic matter in the upper 10 inches:* 85 percent

*Typical profile:*

Oa1-Oa4—0 to 32 inches; muck

Cg—32 to 60 inches; fine sand

**Berner**

*Extent:* 0 to 10 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Muck

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Organic material over glaciolacustrine deposits and/or till

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May, June)

*Deepest depth to wet zone:* 2.1 feet (February)

*Shallowest ponding:* 0.3 foot (January, February, July, August, September, October, November, December)

*Deepest ponding:* 0.5 foot (March, April, May, June)

*Available water capacity to a depth of 60 inches:* 15.9 inches

*Content of organic matter in the upper 10 inches:* 85 percent

*Typical profile:*

Oa1,Oa2—0 to 28 inches; muck

A—28 to 31 inches; sandy loam

Bg—31 to 44 inches; sand

2CBkg—44 to 80 inches; loam

**Major Uses of the Map Unit**

- Pasture, hayland, wildlife habitat

**I59A—Smiley loam, 0 to 2 percent slopes****Component Description****Smiley and similar soils**

*Extent:* 65 percent of the unit

*Geomorphic component:* Flats and swales on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 3.8 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, December

*Deepest ponding:* 0.3 foot (April, May, June, September, October, November)

*Available water capacity to a depth of 60 inches:* 10.8 inches

*Content of organic matter in the upper 10 inches:* 5 percent

*Typical profile:*

Ap—0 to 12 inches; loam

Btg—12 to 19 inches; clay loam

Bkg1-Bkg3—19 to 42 inches; loam

Cg1,Cg2—42 to 80 inches; loam

### **Smiley, very cobbly**

*Extent:* 10 percent of the unit

*Geomorphic component:* Swales and flats on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 3.8 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, December

*Deepest ponding:* 0.3 foot (April, May, June, September, October, November)

*Available water capacity to a depth of 60 inches:* 10.8 inches

*Content of organic matter in the upper 10 inches:* 5 percent

*Typical profile:*

Ap—0 to 12 inches; loam

Btg—12 to 19 inches; clay loam

Bkg1-Bkg3—19 to 42 inches; loam

Cg1,Cg2—42 to 80 inches; loam

### **Kratka**

*Extent:* 9 percent of the unit

*Geomorphic component:* Swales and flats on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 4.1 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, September, December

*Deepest ponding:* 0.3 foot (April, May)

*Available water capacity to a depth of 60 inches:* 9.1 inches

*Content of organic matter in the upper 10 inches:* 6 percent

*Typical profile:*

Ap,A—0 to 11 inches; fine sandy loam  
 Bg1,Bg2—11 to 18 inches; loamy fine sand  
 Cg1—18 to 25 inches; fine sand  
 2Cg2-2Cg4—25 to 80 inches; loam

**Roliss**

*Extent:* 5 percent of the unit  
*Geomorphic component:* Swales and flats on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 3.8 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, December  
*Deepest ponding:* 0.3 foot (April, May, June, September, October, November)  
*Available water capacity to a depth of 60 inches:* 10.7 inches  
*Content of organic matter in the upper 10 inches:* 5 percent  
*Typical profile:*  
 Ap,A—0 to 14 inches; loam  
 Bg—14 to 20 inches; loam  
 Cg1-Cg4—20 to 80 inches; loam

**Reiner**

*Extent:* 4 percent of the unit  
*Geomorphic component:* Rises on lake plains  
*Slope range:* 0 to 3 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Till  
*Flooding:* None  
*Shallowest depth to wet zone:* 2.5 feet (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 10.2 inches  
*Content of organic matter in the upper 10 inches:* 2.3 percent  
*Typical profile:*  
 Ap—0 to 7 inches; fine sandy loam  
 Bt—7 to 17 inches; clay loam  
 Bw,Bk1,Bk2—17 to 35 inches; loam  
 C1-C3—35 to 80 inches; loam

**Linveldt**

*Extent:* 3 percent of the unit  
*Geomorphic component:* Rises on lake plains  
*Slope range:* 0 to 3 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 2.5 feet (April)

*Deepest depth to wet zone:* 6.7 feet (transitory) (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 8.9 inches

*Content of organic matter in the upper 10 inches:* 2.8 percent

*Typical profile:*

Ap—0 to 9 inches; fine sandy loam

Bt—9 to 16 inches; loam

2Bw1,2Bw2—16 to 29 inches; sand

3Bk—29 to 45 inches; loam

3C1-3C3—45 to 80 inches; loam

### **Smiley, depressional**

*Extent:* 3 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Mucky loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May)

*Deepest depth to wet zone:* 2.5 feet (February)

*Shallowest ponding:* 0.3 foot (July, August, September, October)

*Deepest ponding:* 0.5 foot (January, February, March, April, May, June, November, December)

*Available water capacity to a depth of 60 inches:* 11.1 inches

*Content of organic matter in the upper 10 inches:* 10 percent

*Typical profile:*

Ap—0 to 12 inches; mucky loam

Btg—12 to 19 inches; clay loam

Bkg1,Bkg2—19 to 42 inches; loam

Cg—42 to 80 inches; loam

### **Strandquist**

*Extent:* 1 percent of the unit

*Geomorphic component:* Flats and swales on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 4.1 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, September, November, December

*Deepest ponding:* 0.3 foot (April, May, June, October)

*Available water capacity to a depth of 60 inches:* 9.3 inches

*Content of organic matter in the upper 10 inches:* 6 percent

*Typical profile:*

Ap—0 to 10 inches; loam

2Bg1—10 to 20 inches; very gravelly sand

3Bg2,3Cg—20 to 60 inches; loam

### Major Uses of the Map Unit

- Cropland, pasture, hayland

## 160A—Smiley mucky loam, depressional, 0 to 1 percent slopes

### Component Description

#### Smiley, depressional, and similar soils

*Extent:* 80 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Mucky loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May)

*Deepest depth to wet zone:* 2.5 feet (February)

*Shallowest ponding:* 0.3 foot (July, August, September, October)

*Deepest ponding:* 0.5 foot (January, February, March, April, May, June, November, December)

*Available water capacity to a depth of 60 inches:* 11.1 inches

*Content of organic matter in the upper 10 inches:* 10 percent

*Typical profile:*

Ap—0 to 12 inches; mucky loam

Btg—12 to 19 inches; clay loam

Bkg1-Bkg3—19 to 42 inches; loam

Cg1,Cg2—42 to 80 inches; loam

#### Smiley

*Extent:* 10 percent of the unit

*Geomorphic component:* Flats and swales on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 3.8 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, December

*Deepest ponding:* 0.3 foot (April, May, June, September, October, November)

*Available water capacity to a depth of 60 inches:* 10.8 inches

*Content of organic matter in the upper 10 inches:* 5 percent

*Typical profile:*

Ap—0 to 12 inches; loam

Btg—12 to 19 inches; clay loam

Bkg1-Bkg3—19 to 42 inches; loam

Cg1,Cg2—42 to 80 inches; loam

#### Hamre

*Extent:* 5 percent of the unit

*Geomorphic component:* Depressions on lake plains  
*Slope range:* 0 to 1 percent  
*Texture of the surface layer:* Muck  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Very poorly drained  
*Flooding:* None  
*Shallowest depth to wet zone:* At the surface (March, April, May)  
*Deepest depth to wet zone:* 2.5 feet (February)  
*Shallowest ponding:* 0.3 foot (July, August, September)  
*Deepest ponding:* 0.5 foot (January, February, March, April, May, June, October, November, December)  
*Available water capacity to a depth of 60 inches:* 13.3 inches  
*Content of organic matter in the upper 10 inches:* 85 percent  
*Typical profile:*  
     Oa—0 to 13 inches; muck  
     A—13 to 18 inches; loam  
     Bg1,Bg2—18 to 71 inches; loam  
     Cg—71 to 80 inches; loam

### **Kratka**

*Extent:* 5 percent of the unit  
*Geomorphic component:* Flats and swales on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 4.1 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, September, December  
*Deepest ponding:* 0.3 foot (April, May)  
*Available water capacity to a depth of 60 inches:* 9.1 inches  
*Content of organic matter in the upper 10 inches:* 6 percent  
*Typical profile:*  
     Ap,A—0 to 11 inches; fine sandy loam  
     Bg1,Bg2—11 to 18 inches; loamy fine sand  
     Cg1—18 to 25 inches; fine sand  
     2Cg2-2Cg4—25 to 80 inches; loam

### **Major Uses of the Map Unit**

- Pasture, hayland, wildlife habitat

## **I61A—Strandquist loam, 0 to 2 percent slopes**

### **Component Description**

#### **Strandquist and similar soils**

*Extent:* 70 percent of the unit  
*Geomorphic component:* Swales and flats on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 4.1 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, September, November, December

*Deepest ponding:* 0.3 foot (April, May, June, October)

*Available water capacity to a depth of 60 inches:* 9.3 inches

*Content of organic matter in the upper 10 inches:* 6 percent

*Typical profile:*

Ap—0 to 10 inches; loam

2Bg1—10 to 20 inches; very gravelly sand

3Bg2,3Cg—20 to 60 inches; loam

### **Mavie**

*Extent:* 8 percent of the unit

*Geomorphic component:* Swales and flats on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 4.1 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, September, November, December

*Deepest ponding:* 0.3 foot (April, May, June, October)

*Available water capacity to a depth of 60 inches:* 7.4 inches

*Content of organic matter in the upper 10 inches:* 6 percent

*Typical profile:*

Ap—0 to 12 inches; fine sandy loam

Bk—12 to 18 inches; sandy loam

2C1,2C2—18 to 39 inches; very gravelly coarse sand

3C3—39 to 80 inches; loam

### **Roliss**

*Extent:* 7 percent of the unit

*Geomorphic component:* Flats and swales on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 3.8 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, December

*Deepest ponding:* 0.3 foot (April, May, June, September, October, November)

*Available water capacity to a depth of 60 inches:* 10.7 inches

*Content of organic matter in the upper 10 inches:* 5 percent

*Typical profile:*

Ap,A—0 to 14 inches; loam

Bg—14 to 20 inches; loam  
 Cg1-Cg4—20 to 80 inches; loam

### **Kratka**

*Extent:* 5 percent of the unit  
*Geomorphic component:* Swales and flats on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 4.1 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, September, December  
*Deepest ponding:* 0.3 foot (April, May)  
*Available water capacity to a depth of 60 inches:* 9.1 inches  
*Content of organic matter in the upper 10 inches:* 6 percent  
*Typical profile:*  
 Ap,A—0 to 11 inches; fine sandy loam  
 Bg1,Bg2—11 to 18 inches; loamy fine sand  
 Cg1—18 to 25 inches; fine sand  
 2Cg2-2Cg4—25 to 80 inches; loam

### **Foxhome**

*Extent:* 4 percent of the unit  
*Geomorphic component:* Rises on lake plains  
*Slope range:* 0 to 3 percent  
*Texture of the surface layer:* Sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 2.5 feet (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 8.6 inches  
*Content of organic matter in the upper 10 inches:* 3 percent  
*Typical profile:*  
 Ap—0 to 10 inches; sandy loam  
 Bw1—10 to 15 inches; loamy sand  
 2Bw2—15 to 23 inches; very gravelly coarse sand  
 3C1-3C3—23 to 80 inches; loam

### **Hangaard**

*Extent:* 3 percent of the unit  
*Geomorphic component:* Swales and flats on beach plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Beach deposits  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.3 foot (April)  
*Deepest depth to wet zone:* 3.3 feet (February, August)

*Months when ponding does not occur:* January, February, March, July, August, September, October, November, December

*Deepest ponding:* 0.3 foot (April, May)

*Available water capacity to a depth of 60 inches:* 3 inches

*Content of organic matter in the upper 10 inches:* 6 percent

*Typical profile:*

Ap—0 to 10 inches; sandy loam

A—10 to 15 inches; loamy sand

Cg1-Cg5—15 to 80 inches; gravelly coarse sand

### **Northwood**

*Extent:* 3 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Muck

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Organic material over glaciolacustrine deposits and/or till

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May)

*Deepest depth to wet zone:* 2.5 feet (February)

*Shallowest ponding:* 0.3 foot (July, August, September)

*Deepest ponding:* 0.5 foot (January, February, March, April, May, June, October, November, December)

*Available water capacity to a depth of 60 inches:* 11.3 inches

*Content of organic matter in the upper 10 inches:* 78.6 percent

*Typical profile:*

Oa—0 to 9 inches; muck

A—9 to 14 inches; loamy fine sand

Bg1, Bg2—14 to 24 inches; fine sand

2BCkg-2Cg—24 to 80 inches; loam

### **Major Uses of the Map Unit**

- Cropland, pasture, hayland

## **I62A—Syrene sandy loam, 0 to 2 percent slopes**

### **Component Description**

#### **Syrene and similar soils**

*Extent:* 70 percent of the unit

*Geomorphic component:* Flats and swales on beach plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Beach deposits

*Flooding:* None

*Shallowest depth to wet zone:* 0.3 foot (April)

*Deepest depth to wet zone:* 3.3 feet (February, August)

*Months when ponding does not occur:* January, February, March, July, August, September, October, November, December

*Deepest ponding:* 0.3 foot (April, May)

*Available water capacity to a depth of 60 inches:* 3.8 inches

*Content of organic matter in the upper 10 inches:* 5.6 percent

*Typical profile:*

- Ap—0 to 9 inches; sandy loam
- Bkg1—9 to 17 inches; sandy loam
- 2Bkg2—17 to 27 inches; stratified loamy fine sand to gravelly coarse sand
- 2Cg—27 to 60 inches; stratified loamy fine sand to gravelly coarse sand

**Rosewood**

- Extent:* 11 percent of the unit
- Geomorphic component:* Flats and swales on lake plains
- Slope range:* 0 to 2 percent
- Texture of the surface layer:* Fine sandy loam
- Depth to restrictive feature:* Very deep (more than 60 inches)
- Drainage class:* Poorly drained
- Parent material:* Glaciolacustrine deposits
- Flooding:* None
- Shallowest depth to wet zone:* 0.5 foot (April)
- Deepest depth to wet zone:* 4.9 feet (August)
- Months when ponding does not occur:* January, February, March, July, August, September, November, December
- Deepest ponding:* 0.3 foot (April, May, June, October)
- Available water capacity to a depth of 60 inches:* 5.6 inches
- Content of organic matter in the upper 10 inches:* 5 percent
- Typical profile:*
  - Ap—0 to 8 inches; fine sandy loam
  - Bkg1,Bkg2—8 to 18 inches; fine sandy loam
  - Cg1-Cg3—18 to 80 inches; fine sand

**Hangaard**

- Extent:* 5 percent of the unit
- Geomorphic component:* Swales and flats on beach plains
- Slope range:* 0 to 2 percent
- Texture of the surface layer:* Sandy loam
- Depth to restrictive feature:* Very deep (more than 60 inches)
- Drainage class:* Poorly drained
- Parent material:* Beach deposits
- Flooding:* None
- Shallowest depth to wet zone:* 0.3 foot (April)
- Deepest depth to wet zone:* 3.3 feet (February, August)
- Months when ponding does not occur:* January, February, March, July, August, September, October, November, December
- Deepest ponding:* 0.3 foot (April, May)
- Available water capacity to a depth of 60 inches:* 3 inches
- Content of organic matter in the upper 10 inches:* 6 percent
- Typical profile:*
  - Ap—0 to 10 inches; sandy loam
  - A—10 to 15 inches; loamy sand
  - Cg1-Cg5—15 to 80 inches; gravelly coarse sand

**Karlsruhe**

- Extent:* 4 percent of the unit
- Geomorphic component:* Rises on beach plains
- Slope range:* 0 to 3 percent
- Texture of the surface layer:* Sandy loam
- Depth to restrictive feature:* Very deep (more than 60 inches)
- Drainage class:* Somewhat poorly drained

*Parent material:* Beach deposits

*Flooding:* None

*Shallowest depth to wet zone:* 2 feet (April)

*Deepest depth to wet zone:* 6.7 feet (transitory) (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 5.2 inches

*Content of organic matter in the upper 10 inches:* 4 percent

*Typical profile:*

A, Ak, ABk—0 to 15 inches; sandy loam

Bk, BCk—15 to 30 inches; loamy sand

C1, C2—30 to 60 inches; coarse sand

### **Deerwood**

*Extent:* 3 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Muck

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Organic material over glaciolacustrine deposits

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May)

*Deepest depth to wet zone:* 2.5 feet (February)

*Shallowest ponding:* 0.3 foot (July, August, September)

*Deepest ponding:* 0.5 foot (January, February, March, April, May, June, October, November, December)

*Available water capacity to a depth of 60 inches:* 7.1 inches

*Content of organic matter in the upper 10 inches:* 75 percent

*Typical profile:*

Oa—0 to 10 inches; muck

A—10 to 12 inches; loamy sand

Cg1, Cg2—12 to 60 inches; sand

### **Hamar**

*Extent:* 3 percent of the unit

*Geomorphic component:* Swales and flats on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Loamy fine sand

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 4.9 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, September, November, December

*Deepest ponding:* 0.3 foot (April, May, June, October)

*Available water capacity to a depth of 60 inches:* 5 inches

*Content of organic matter in the upper 10 inches:* 6 percent

*Typical profile:*

A1, A2—0 to 12 inches; loamy fine sand

AC—12 to 17 inches; loamy fine sand

C1, C2—17 to 40 inches; fine sand

Ab—40 to 47 inches; loamy fine sand

Cg—47 to 60 inches; fine sand

**Strandquist**

*Extent:* 2 percent of the unit

*Geomorphic component:* Swales and flats on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 4.1 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, September, November, December

*Deepest ponding:* 0.3 foot (April, May, June, October)

*Available water capacity to a depth of 60 inches:* 9.3 inches

*Content of organic matter in the upper 10 inches:* 6 percent

*Typical profile:*

Ap—0 to 10 inches; loam

2Bg1—10 to 20 inches; very gravelly sand

3Bg2,3Cg—20 to 60 inches; loam

**Radium**

*Extent:* 1 percent of the unit

*Geomorphic component:* Beach ridges

*Position on the landform:* Backslopes

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Loamy sand

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Moderately well drained

*Parent material:* Beach deposits

*Flooding:* None

*Shallowest depth to wet zone:* 3 feet (April)

*Deepest depth to wet zone:* More than 6.7 feet (July, August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 3.8 inches

*Content of organic matter in the upper 10 inches:* 2 percent

*Typical profile:*

Ap—0 to 14 inches; loamy sand

Bw1,Bw2—14 to 33 inches; sand

C1—33 to 43 inches; very gravelly coarse sand

C2-C4—43 to 80 inches; sand

**Wyandotte**

*Extent:* 1 percent of the unit

*Geomorphic component:* Swales and flats on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Clay loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 3.8 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, September, November, December

*Deepest ponding:* 0.3 foot (April, May, June)  
*Available water capacity to a depth of 60 inches:* 6.5 inches  
*Content of organic matter in the upper 10 inches:* 4.1 percent  
*Typical profile:*

Ap—0 to 8 inches; clay loam  
 Bk—8 to 15 inches; sandy clay loam  
 2C1-2C3—15 to 34 inches; very gravelly loamy coarse sand  
 3Cg—34 to 60 inches; clay

### Major Uses of the Map Unit

- Cropland, pasture, hayland

## I63A—Thiefriever fine sandy loam, 0 to 2 percent slopes

### Component Description

#### Thiefriever and similar soils

*Extent:* 70 percent of the unit  
*Geomorphic component:* Flats and swales on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 3.8 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, December  
*Deepest ponding:* 0.3 foot (April, May, June)  
*Available water capacity to a depth of 60 inches:* 7.5 inches  
*Content of organic matter in the upper 10 inches:* 6 percent  
*Typical profile:*

Ap,A—0 to 12 inches; fine sandy loam  
 Bkg1-Bkg3—12 to 23 inches; loamy fine sand  
 Cg1—23 to 32 inches; fine sand  
 2Cg2,2Cg3—32 to 80 inches; clay

#### Espelie

*Extent:* 10 percent of the unit  
*Geomorphic component:* Flats and swales on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 3.8 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, December  
*Deepest ponding:* 0.3 foot (April, May, June)  
*Available water capacity to a depth of 60 inches:* 7.1 inches  
*Content of organic matter in the upper 10 inches:* 5.6 percent

*Typical profile:*

Ap—0 to 9 inches; fine sandy loam  
 Bw1,Bw2—9 to 24 inches; fine sand  
 2Bg-2Cg—24 to 80 inches; clay

**Foxlake**

*Extent:* 7 percent of the unit  
*Geomorphic component:* Swales and flats on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Till  
*Flooding:* None  
*Shallowest depth to wet zone:* At the surface (April)  
*Deepest depth to wet zone:* 3 feet (August)  
*Months when ponding does not occur:* January, February, March, December  
*Deepest ponding:* 0.3 foot (April, May, June, November)  
*Available water capacity to a depth of 60 inches:* 8.9 inches  
*Content of organic matter in the upper 10 inches:* 5 percent  
*Typical profile:*

Ap,A—0 to 19 inches; loam  
 Bg—19 to 38 inches; silty clay  
 Bkg—38 to 49 inches; clay  
 Cg—49 to 80 inches; clay

**Huot**

*Extent:* 5 percent of the unit  
*Geomorphic component:* Rises on lake plains  
*Slope range:* 0 to 3 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 2.5 feet (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 7.6 inches  
*Content of organic matter in the upper 10 inches:* 3 percent  
*Typical profile:*

Ap,Ak—0 to 14 inches; fine sandy loam  
 Bk—14 to 26 inches; loamy fine sand  
 C1—26 to 34 inches; fine sand  
 2C2,2C3—34 to 80 inches; clay

**Clearwater, depressional**

*Extent:* 3 percent of the unit  
*Geomorphic component:* Depressions on lake plains  
*Slope range:* 0 to 1 percent  
*Texture of the surface layer:* Mucky clay loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Very poorly drained  
*Parent material:* Till  
*Flooding:* None  
*Shallowest depth to wet zone:* At the surface (March, April, May)

*Deepest depth to wet zone:* 1.6 feet (February, August)  
*Ponding depth:* 0.5 foot (all year)  
*Available water capacity to a depth of 60 inches:* 9 inches  
*Content of organic matter in the upper 10 inches:* 8.4 percent  
*Typical profile:*  
 Ap—0 to 8 inches; mucky clay loam  
 Bss1,Bss2—8 to 35 inches; clay  
 Cg1,Cg2—35 to 80 inches; clay

### **Rosewood**

*Extent:* 3 percent of the unit  
*Geomorphic component:* Swales and flats on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 4.9 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, September, November, December  
*Deepest ponding:* 0.3 foot (April, May, June, October)  
*Available water capacity to a depth of 60 inches:* 5.6 inches  
*Content of organic matter in the upper 10 inches:* 5 percent  
*Typical profile:*  
 Ap—0 to 8 inches; fine sandy loam  
 Bkg1,Bkg2—8 to 18 inches; fine sandy loam  
 Cg1-Cg3—18 to 80 inches; fine sand

### **Ulen**

*Extent:* 1 percent of the unit  
*Geomorphic component:* Rises on lake plains  
*Slope range:* 0 to 3 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Glaciolacustrine deposits  
*Flooding:* None  
*Shallowest depth to wet zone:* 2 feet (April)  
*Deepest depth to wet zone:* More than 6.7 feet (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 5.8 inches  
*Content of organic matter in the upper 10 inches:* 2.8 percent  
*Typical profile:*  
 Ap—0 to 9 inches; fine sandy loam  
 Bk1,Bk2—9 to 42 inches; loamy fine sand  
 C—42 to 60 inches; fine sand

### **Wyandotte**

*Extent:* 1 percent of the unit  
*Geomorphic component:* Flats and swales on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Clay loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 3.8 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, September, November, December

*Deepest ponding:* 0.3 foot (April, May, June)

*Available water capacity to a depth of 60 inches:* 6.5 inches

*Content of organic matter in the upper 10 inches:* 4.1 percent

*Typical profile:*

Ap—0 to 8 inches; clay loam

Bk—8 to 15 inches; sandy clay loam

2C1-2C3—15 to 34 inches; very gravelly loamy coarse sand

3Cg—34 to 60 inches; clay

### Major Uses of the Map Unit

- Cropland, pasture, hayland

## I64A—Ulen fine sandy loam, 0 to 3 percent slopes

### Component Description

#### Ulen and similar soils

*Extent:* 70 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Moderately well drained

*Parent material:* Glaciolacustrine deposits

*Flooding:* None

*Shallowest depth to wet zone:* 2 feet (April)

*Deepest depth to wet zone:* More than 6.7 feet (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 5.8 inches

*Content of organic matter in the upper 10 inches:* 2.8 percent

*Typical profile:*

Ap—0 to 9 inches; fine sandy loam

Bk1,Bk2—9 to 42 inches; loamy fine sand

C—42 to 60 inches; fine sand

#### Rosewood

*Extent:* 10 percent of the unit

*Geomorphic component:* Flats and swales on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 4.9 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, September, November, December

*Deepest ponding:* 0.3 foot (April, May, June, October)

*Available water capacity to a depth of 60 inches:* 5.6 inches

*Content of organic matter in the upper 10 inches:* 5 percent

*Typical profile:*

Ap—0 to 8 inches; fine sandy loam

Bkg1,Bkg2—8 to 18 inches; fine sandy loam

Cg1-Cg3—18 to 80 inches; fine sand

### **Flaming**

*Extent:* 8 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Loamy fine sand

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Moderately well drained

*Parent material:* Glaciolacustrine deposits

*Flooding:* None

*Shallowest depth to wet zone:* 2.5 feet (April)

*Deepest depth to wet zone:* More than 6.7 feet (July, August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 4.9 inches

*Content of organic matter in the upper 10 inches:* 3 percent

*Typical profile:*

Ap,A—0 to 12 inches; loamy fine sand

BA—12 to 17 inches; fine sand

Bw—17 to 27 inches; fine sand

C1,C2—27 to 60 inches; fine sand

### **Karlsruhe**

*Extent:* 5 percent of the unit

*Geomorphic component:* Rises on beach plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Somewhat poorly drained

*Parent material:* Beach deposits

*Flooding:* None

*Shallowest depth to wet zone:* 2 feet (April)

*Deepest depth to wet zone:* 6.7 feet (transitory) (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 5.2 inches

*Content of organic matter in the upper 10 inches:* 4 percent

*Typical profile:*

A,Ak,ABk—0 to 15 inches; sandy loam

Bk,Bck—15 to 30 inches; loamy sand

C1,C2—30 to 60 inches; coarse sand

### **Radium**

*Extent:* 3 percent of the unit

*Geomorphic component:* Beach ridges

*Position on the landform:* Backslopes

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Loamy sand

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Moderately well drained

*Parent material:* Beach deposits

*Flooding:* None

*Shallowest depth to wet zone:* 3 feet (April)  
*Deepest depth to wet zone:* More than 6.7 feet (July, August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 3.8 inches  
*Content of organic matter in the upper 10 inches:* 2 percent  
*Typical profile:*  
     Ap—0 to 14 inches; loamy sand  
     Bw1,Bw2—14 to 33 inches; sand  
     C1—33 to 43 inches; very gravelly coarse sand  
     C2-C4—43 to 80 inches; sand

### **Strathcona**

*Extent:* 2 percent of the unit  
*Geomorphic component:* Flats and swales on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 4.1 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, September, December  
*Deepest ponding:* 0.3 foot (April, May)  
*Available water capacity to a depth of 60 inches:* 9 inches  
*Content of organic matter in the upper 10 inches:* 6 percent  
*Typical profile:*  
     Ap—0 to 10 inches; fine sandy loam  
     Bkg—10 to 17 inches; fine sandy loam  
     Cg1—17 to 28 inches; fine sand  
     2Cg2,2Cg3—28 to 80 inches; loam

### **Thiefriver**

*Extent:* 2 percent of the unit  
*Geomorphic component:* Flats and swales on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 3.8 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, December  
*Deepest ponding:* 0.3 foot (April, May, June)  
*Available water capacity to a depth of 60 inches:* 7.5 inches  
*Content of organic matter in the upper 10 inches:* 6 percent  
*Typical profile:*  
     Ap,A—0 to 12 inches; fine sandy loam  
     Bkg1-Bkg3—12 to 23 inches; loamy fine sand  
     Cg1—23 to 32 inches; fine sand  
     2Cg2,2Cg3—32 to 80 inches; clay

### Major Uses of the Map Unit

- Cropland, pasture, hayland

## I65A—Ulen loamy fine sand, 0 to 3 percent slopes

### Component Description

#### Ulen and similar soils

*Extent:* 70 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Loamy fine sand

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Somewhat poorly drained

*Parent material:* Glaciolacustrine deposits

*Flooding:* None

*Shallowest depth to wet zone:* 2 feet (April)

*Deepest depth to wet zone:* More than 6.7 feet (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 5.4 inches

*Content of organic matter in the upper 10 inches:* 2.8 percent

*Typical profile:*

Ap—0 to 9 inches; loamy fine sand

Bk1,Bk2—9 to 42 inches; loamy fine sand

C—42 to 60 inches; fine sand

#### Rosewood

*Extent:* 10 percent of the unit

*Geomorphic component:* Swales and flats on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 4.9 feet (August)

*Months when ponding does not occur:* January, February, March, July, August,

September, November, December

*Deepest ponding:* 0.3 foot (April, May, June, October)

*Available water capacity to a depth of 60 inches:* 5.6 inches

*Content of organic matter in the upper 10 inches:* 5 percent

*Typical profile:*

Ap—0 to 8 inches; fine sandy loam

Bkg1,Bkg2—8 to 18 inches; fine sandy loam

Cg1-Cg3—18 to 80 inches; fine sand

#### Flaming

*Extent:* 6 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Loamy fine sand

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Moderately well drained

*Parent material:* Glaciolacustrine deposits  
*Flooding:* None  
*Shallowest depth to wet zone:* 2.5 feet (April)  
*Deepest depth to wet zone:* More than 6.7 feet (July, August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 4.9 inches  
*Content of organic matter in the upper 10 inches:* 3 percent  
*Typical profile:*  
     Ap,A—0 to 12 inches; loamy fine sand  
     BA—12 to 17 inches; fine sand  
     Bw—17 to 27 inches; fine sand  
     C1,C2—27 to 60 inches; fine sand

### **Poppleton**

*Extent:* 4 percent of the unit  
*Geomorphic component:* Rises on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Fine sand  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Glaciolacustrine deposits  
*Flooding:* None  
*Shallowest depth to wet zone:* 2.5 feet (April)  
*Deepest depth to wet zone:* More than 6.7 feet (July, August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 5 inches  
*Content of organic matter in the upper 10 inches:* 1 percent  
*Typical profile:*  
     Ap—0 to 6 inches; fine sand  
     E—6 to 9 inches; fine sand  
     Bw1-Bw4—9 to 40 inches; fine sand  
     C1,C2—40 to 60 inches; fine sand

### **Karlsruhe**

*Extent:* 3 percent of the unit  
*Geomorphic component:* Rises on beach plains  
*Slope range:* 0 to 3 percent  
*Texture of the surface layer:* Sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Somewhat poorly drained  
*Parent material:* Beach deposits  
*Flooding:* None  
*Shallowest depth to wet zone:* 2 feet (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 5.2 inches  
*Content of organic matter in the upper 10 inches:* 4 percent  
*Typical profile:*  
     A,Ak,ABk—0 to 15 inches; sandy loam  
     Bk,BCk—15 to 30 inches; loamy sand  
     C1,C2—30 to 60 inches; coarse sand

### **Radium**

*Extent:* 3 percent of the unit  
*Geomorphic component:* Beach ridges  
*Position on the landform:* Backslopes

*Slope range:* 0 to 3 percent  
*Texture of the surface layer:* Loamy sand  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Moderately well drained  
*Parent material:* Beach deposits  
*Flooding:* None  
*Shallowest depth to wet zone:* 3 feet (April)  
*Deepest depth to wet zone:* More than 6.7 feet (July, August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 3.8 inches  
*Content of organic matter in the upper 10 inches:* 2 percent  
*Typical profile:*  
     Ap—0 to 14 inches; loamy sand  
     Bw1,Bw2—14 to 33 inches; sand  
     C1—33 to 43 inches; very gravelly coarse sand  
     C2-C4—43 to 80 inches; sand

### **Strathcona**

*Extent:* 2 percent of the unit  
*Geomorphic component:* Flats and swales on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 4.1 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, September, December  
*Deepest ponding:* 0.3 foot (April, May)  
*Available water capacity to a depth of 60 inches:* 9 inches  
*Content of organic matter in the upper 10 inches:* 6 percent  
*Typical profile:*  
     Ap—0 to 10 inches; fine sandy loam  
     Bkg—10 to 17 inches; fine sandy loam  
     Cg1—17 to 28 inches; fine sand  
     2Cg2,2Cg3—28 to 80 inches; loam

### **Thiefriever**

*Extent:* 2 percent of the unit  
*Geomorphic component:* Swales and flats on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 3.8 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, December  
*Deepest ponding:* 0.3 foot (April, May, June)  
*Available water capacity to a depth of 60 inches:* 7.5 inches  
*Content of organic matter in the upper 10 inches:* 6 percent

*Typical profile:*

Ap,A—0 to 12 inches; fine sandy loam  
 Bkg1-Bkg3—12 to 23 inches; loamy fine sand  
 Cg1—23 to 32 inches; fine sand  
 2Cg2,2Cg3—32 to 80 inches; clay

**Major Uses of the Map Unit**

- Cropland, pasture, hayland

**I66A—Vallers loam, 0 to 2 percent slopes****Component Description****Vallers and similar soils**

*Extent:* 75 percent of the unit

*Geomorphic component:* Swales and flats on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 3.8 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, December

*Deepest ponding:* 0.3 foot (April, May, June, September, October, November)

*Available water capacity to a depth of 60 inches:* 10.6 inches

*Content of organic matter in the upper 10 inches:* 5 percent

*Typical profile:*

A1,A2—0 to 12 inches; loam  
 Bkg1,Bkg2—12 to 21 inches; loam  
 Cg1,Cg2—21 to 60 inches; loam

**Vallers, very cobbly**

*Extent:* 7 percent of the unit

*Geomorphic component:* Swales and flats on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 3.8 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, December

*Deepest ponding:* 0.3 foot (April, May, June, September, October, November)

*Available water capacity to a depth of 60 inches:* 10.6 inches

*Content of organic matter in the upper 10 inches:* 5 percent

*Typical profile:*

A1,A2—0 to 12 inches; loam  
 Bkg1,Bkg2—12 to 21 inches; loam  
 Cg1,Cg2—21 to 60 inches; loam

**Hamerly**

*Extent:* 6 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Somewhat poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* 1.3 feet (April)

*Deepest depth to wet zone:* 6.7 feet (transitory) (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 10.5 inches

*Content of organic matter in the upper 10 inches:* 2.5 percent

*Typical profile:*

Ap—0 to 8 inches; loam

Bk1,Bk2—8 to 25 inches; loam

C—25 to 60 inches; loam

**Grimstad**

*Extent:* 3 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Somewhat poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 1.5 feet (April)

*Deepest depth to wet zone:* More than 6.7 feet (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 9.2 inches

*Content of organic matter in the upper 10 inches:* 2.8 percent

*Typical profile:*

Ap—0 to 9 inches; fine sandy loam

Bk1,Bk2—9 to 22 inches; loamy fine sand

C1—22 to 28 inches; fine sand

2C2,2C3—28 to 60 inches; loam

**Mavie**

*Extent:* 3 percent of the unit

*Geomorphic component:* Swales and flats on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 4.1 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, September, November, December

*Deepest ponding:* 0.3 foot (April, May, June, October)

*Available water capacity to a depth of 60 inches:* 7.4 inches

*Content of organic matter in the upper 10 inches:* 6 percent

*Typical profile:*

Ap—0 to 12 inches; fine sandy loam

Bk—12 to 18 inches; sandy loam

2C1,2C2—18 to 39 inches; very gravelly coarse sand

3C3—39 to 80 inches; loam

### **Roliss, depressional**

*Extent:* 3 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May)

*Deepest depth to wet zone:* 2.5 feet (February)

*Shallowest ponding:* 0.3 foot (July, August, September, October)

*Deepest ponding:* 0.5 foot (January, February, March, April, May, June, November, December)

*Available water capacity to a depth of 60 inches:* 10.9 inches

*Content of organic matter in the upper 10 inches:* 10 percent

*Typical profile:*

Ap,A—0 to 14 inches; loam

Bg—14 to 20 inches; loam

Cg1-Cg4—20 to 80 inches; loam

### **Strathcona**

*Extent:* 3 percent of the unit

*Geomorphic component:* Flats and swales on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 4.1 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, September, December

*Deepest ponding:* 0.3 foot (April, May)

*Available water capacity to a depth of 60 inches:* 9 inches

*Content of organic matter in the upper 10 inches:* 6 percent

*Typical profile:*

Ap—0 to 10 inches; fine sandy loam

Bkg—10 to 17 inches; fine sandy loam

Cg1—17 to 28 inches; fine sand

2Cg2,2Cg3—28 to 80 inches; loam

### **Major Uses of the Map Unit**

- Cropland

## **I67A—Wheatville loam, 0 to 3 percent slopes**

### **Component Description**

#### **Wheatville and similar soils**

*Extent:* 70 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Somewhat poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 1.3 feet (April)

*Deepest depth to wet zone:* 6.7 feet (transitory) (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 9.6 inches

*Content of organic matter in the upper 10 inches:* 2.8 percent

*Typical profile:*

Ap—0 to 9 inches; loam

Bk1,Bk2—9 to 31 inches; very fine sandy loam

2C1-2C4—31 to 80 inches; clay

#### **Augsburg**

*Extent:* 13 percent of the unit

*Geomorphic component:* Flats and swales on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 3.8 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, December

*Deepest ponding:* 0.3 foot (April, May, June, September, October, November)

*Available water capacity to a depth of 60 inches:* 10 inches

*Content of organic matter in the upper 10 inches:* 5 percent

*Typical profile:*

Ap,A—0 to 11 inches; loam

Bkg—11 to 18 inches; very fine sandy loam

Bg1—18 to 33 inches; loamy very fine sand

2Bg2—33 to 60 inches; clay

#### **Glyndon**

*Extent:* 8 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Very fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Somewhat poorly drained

*Parent material:* Glaciolacustrine deposits

*Flooding:* None

*Shallowest depth to wet zone:* 1 foot (April)

*Deepest depth to wet zone:* 6.7 feet (transitory) (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 10.4 inches

*Content of organic matter in the upper 10 inches:* 3 percent

*Typical profile:*

Ap,Ak—0 to 11 inches; very fine sandy loam

Bk1,Bk2—11 to 28 inches; very fine sandy loam

C,Cg—28 to 60 inches; loamy very fine sand

### **Foxlake**

*Extent:* 5 percent of the unit

*Geomorphic component:* Swales and flats on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (April)

*Deepest depth to wet zone:* 3 feet (August)

*Months when ponding does not occur:* January, February, March, December

*Deepest ponding:* 0.3 foot (April, May, June, November)

*Available water capacity to a depth of 60 inches:* 8.9 inches

*Content of organic matter in the upper 10 inches:* 5 percent

*Typical profile:*

Ap,A—0 to 19 inches; loam

Bg—19 to 38 inches; silty clay

Bkg—38 to 49 inches; clay

Cg—49 to 80 inches; clay

### **Hilaire**

*Extent:* 2 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Loamy fine sand

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Moderately well drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 2.5 feet (April)

*Deepest depth to wet zone:* 6.7 feet (transitory) (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 6.5 inches

*Content of organic matter in the upper 10 inches:* 3 percent

*Typical profile:*

Ap,A—0 to 10 inches; loamy fine sand

Bw1-Bw4—10 to 34 inches; fine sand

2BCk—34 to 80 inches; clay

### **Ulen**

*Extent:* 2 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Loamy fine sand

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Somewhat poorly drained

*Parent material:* Glaciolacustrine deposits

*Flooding:* None

*Shallowest depth to wet zone:* 2 feet (April)

*Deepest depth to wet zone:* More than 6.7 feet (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 5.4 inches

*Content of organic matter in the upper 10 inches:* 2.8 percent

*Typical profile:*

Ap—0 to 9 inches; loamy fine sand

Bk1,Bk2—9 to 42 inches; loamy fine sand

C—42 to 60 inches; fine sand

### Major Uses of the Map Unit

- Cropland

## 168A—Wheatville very fine sandy loam, 0 to 3 percent slopes

### Component Description

#### Wheatville and similar soils

*Extent:* 70 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Very fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Somewhat poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 1.3 feet (April)

*Deepest depth to wet zone:* 6.7 feet (transitory) (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 9.4 inches

*Content of organic matter in the upper 10 inches:* 2.8 percent

*Typical profile:*

Ap—0 to 9 inches; very fine sandy loam

Bk1,Bk2—9 to 31 inches; very fine sandy loam

2C1-2C4—31 to 80 inches; clay

#### Augsburg

*Extent:* 13 percent of the unit

*Geomorphic component:* Flats and swales on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 3.8 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, December

*Deepest ponding:* 0.3 foot (April, May, June, September, October, November)

*Available water capacity to a depth of 60 inches:* 10 inches

*Content of organic matter in the upper 10 inches:* 5 percent

*Typical profile:*

Ap,A—0 to 11 inches; loam

Bkg—11 to 18 inches; very fine sandy loam

Bg1—18 to 33 inches; loamy very fine sand

2Bg2—33 to 60 inches; clay

### **Glyndon**

*Extent:* 8 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Very fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Somewhat poorly drained

*Parent material:* Glaciolacustrine deposits

*Flooding:* None

*Shallowest depth to wet zone:* 1 foot (April)

*Deepest depth to wet zone:* 6.7 feet (transitory) (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 10.4 inches

*Content of organic matter in the upper 10 inches:* 3 percent

*Typical profile:*

Ap,Ak—0 to 11 inches; very fine sandy loam

Bk1,Bk2—11 to 28 inches; very fine sandy loam

C,Cg—28 to 60 inches; loamy very fine sand

### **Foxlake**

*Extent:* 5 percent of the unit

*Geomorphic component:* Swales and flats on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (April)

*Deepest depth to wet zone:* 3 feet (August)

*Months when ponding does not occur:* January, February, March, December

*Deepest ponding:* 0.3 foot (April, May, June, November)

*Available water capacity to a depth of 60 inches:* 8.9 inches

*Content of organic matter in the upper 10 inches:* 5 percent

*Typical profile:*

Ap,A—0 to 19 inches; loam

Bg—19 to 38 inches; silty clay

Bkg—38 to 49 inches; clay

Cg—49 to 80 inches; clay

### **Hilaire**

*Extent:* 2 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Loamy fine sand

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Moderately well drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 2.5 feet (April)  
*Deepest depth to wet zone:* 6.7 feet (transitory) (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 6.5 inches  
*Content of organic matter in the upper 10 inches:* 3 percent  
*Typical profile:*  
     Ap,A—0 to 10 inches; loamy fine sand  
     Bw1-Bw4—10 to 34 inches; fine sand  
     2BCk—34 to 80 inches; clay

### **Ulen**

*Extent:* 2 percent of the unit  
*Geomorphic component:* Rises on lake plains  
*Slope range:* 0 to 3 percent  
*Texture of the surface layer:* Loamy fine sand  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Somewhat poorly drained  
*Parent material:* Glaciolacustrine deposits  
*Flooding:* None  
*Shallowest depth to wet zone:* 2 feet (April)  
*Deepest depth to wet zone:* More than 6.7 feet (August)  
*Ponding:* None  
*Available water capacity to a depth of 60 inches:* 5.4 inches  
*Content of organic matter in the upper 10 inches:* 2.8 percent  
*Typical profile:*  
     Ap—0 to 9 inches; loamy fine sand  
     Bk1,Bk2—9 to 42 inches; loamy fine sand  
     C—42 to 60 inches; fine sand

### **Major Uses of the Map Unit**

- Cropland

## **169A—Wyandotte clay loam, 0 to 2 percent slopes**

### **Component Description**

#### **Wyandotte and similar soils**

*Extent:* 65 percent of the unit  
*Geomorphic component:* Flats and swales on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Clay loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 3.8 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, September, November, December  
*Deepest ponding:* 0.3 foot (April, May, June)  
*Available water capacity to a depth of 60 inches:* 6.5 inches

*Content of organic matter in the upper 10 inches:* 4.1 percent

*Typical profile:*

Ap—0 to 8 inches; clay loam

Bk—8 to 15 inches; sandy clay loam

2C1-2C3—15 to 34 inches; very gravelly loamy coarse sand

3Cg—34 to 60 inches; clay

### **Foxlake**

*Extent:* 10 percent of the unit

*Geomorphic component:* Swales and flats on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (April)

*Deepest depth to wet zone:* 3 feet (August)

*Months when ponding does not occur:* January, February, March, December

*Deepest ponding:* 0.3 foot (April, May, June, November)

*Available water capacity to a depth of 60 inches:* 8.9 inches

*Content of organic matter in the upper 10 inches:* 5 percent

*Typical profile:*

Ap,A—0 to 19 inches; loam

Bg—19 to 38 inches; silty clay

Bkg—38 to 49 inches; clay

Cg—49 to 80 inches; clay

### **Espelie**

*Extent:* 8 percent of the unit

*Geomorphic component:* Flats and swales on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 3.8 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, December

*Deepest ponding:* 0.3 foot (April, May, June)

*Available water capacity to a depth of 60 inches:* 7.1 inches

*Content of organic matter in the upper 10 inches:* 5.6 percent

*Typical profile:*

Ap—0 to 9 inches; fine sandy loam

Bw1,Bw2—9 to 24 inches; fine sand

2Bg-2Cg—24 to 80 inches; clay

### **Clearwater, depressional**

*Extent:* 5 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Mucky clay loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May)

*Deepest depth to wet zone:* 1.6 feet (February, August)

*Ponding depth:* 0.5 foot (all year)

*Available water capacity to a depth of 60 inches:* 9 inches

*Content of organic matter in the upper 10 inches:* 8.4 percent

*Typical profile:*

Ap—0 to 8 inches; mucky clay loam

Bss1,Bss2—8 to 35 inches; clay

Cg1,Cg2—35 to 80 inches; clay

### **Thief river**

*Extent:* 5 percent of the unit

*Geomorphic component:* Flats and swales on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 3.8 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, December

*Deepest ponding:* 0.3 foot (April, May, June)

*Available water capacity to a depth of 60 inches:* 7.5 inches

*Content of organic matter in the upper 10 inches:* 6 percent

*Typical profile:*

Ap,A—0 to 12 inches; fine sandy loam

Bkg1-Bkg3—12 to 23 inches; loamy fine sand

Cg1—23 to 32 inches; fine sand

2Cg2,2Cg3—32 to 80 inches; clay

### **Karlsruhe**

*Extent:* 4 percent of the unit

*Geomorphic component:* Rises on beach plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Somewhat poorly drained

*Parent material:* Beach deposits

*Flooding:* None

*Shallowest depth to wet zone:* 2 feet (April)

*Deepest depth to wet zone:* 6.7 feet (transitory) (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 5.2 inches

*Content of organic matter in the upper 10 inches:* 4 percent

*Typical profile:*

A,Ak,ABk—0 to 15 inches; sandy loam

Bk,Bck—15 to 30 inches; loamy sand

C1,C2—30 to 60 inches; coarse sand

### **Syrene**

*Extent:* 3 percent of the unit

*Geomorphic component:* Flats and swales on beach plains

*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Beach deposits  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.3 foot (April)  
*Deepest depth to wet zone:* 3.3 feet (February, August)  
*Months when ponding does not occur:* January, February, March, July, August, September, October, November, December  
*Deepest ponding:* 0.3 foot (April, May)  
*Available water capacity to a depth of 60 inches:* 3.8 inches  
*Content of organic matter in the upper 10 inches:* 5.6 percent  
*Typical profile:*  
     Ap—0 to 9 inches; sandy loam  
     Bkg1—9 to 17 inches; sandy loam  
     2Bkg2—17 to 27 inches; stratified loamy fine sand to gravelly coarse sand  
     2Cg—27 to 60 inches; stratified loamy fine sand to gravelly coarse sand

### Major Uses of the Map Unit

- Cropland, pasture, hayland

## 170A—Strathcona fine sandy loam, 0 to 2 percent slopes

### Component Description

#### Strathcona and similar soils

*Extent:* 70 percent of the unit  
*Geomorphic component:* Flats and swales on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained  
*Parent material:* Glaciolacustrine deposits over till  
*Flooding:* None  
*Shallowest depth to wet zone:* 0.5 foot (April)  
*Deepest depth to wet zone:* 4.1 feet (August)  
*Months when ponding does not occur:* January, February, March, July, August, September, December  
*Deepest ponding:* 0.3 foot (April, May)  
*Available water capacity to a depth of 60 inches:* 9 inches  
*Content of organic matter in the upper 10 inches:* 6 percent  
*Typical profile:*  
     Ap—0 to 10 inches; fine sandy loam  
     Bkg—10 to 17 inches; fine sandy loam  
     Cg1—17 to 28 inches; fine sand  
     2Cg2,2Cg3—28 to 80 inches; loam

#### Kratka

*Extent:* 10 percent of the unit  
*Geomorphic component:* Flats and swales on lake plains  
*Slope range:* 0 to 2 percent  
*Texture of the surface layer:* Fine sandy loam  
*Depth to restrictive feature:* Very deep (more than 60 inches)  
*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 4.1 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, September, December

*Deepest ponding:* 0.3 foot (April, May)

*Available water capacity to a depth of 60 inches:* 9.1 inches

*Content of organic matter in the upper 10 inches:* 6 percent

*Typical profile:*

Ap,A—0 to 11 inches; fine sandy loam

Bg1,Bg2—11 to 18 inches; loamy fine sand

Cg1—18 to 25 inches; fine sand

2Cg2-2Cg4—25 to 80 inches; loam

### **Roliss**

*Extent:* 6 percent of the unit

*Geomorphic component:* Swales and flats on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 3.8 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, December

*Deepest ponding:* 0.3 foot (April, May, June, September, October, November)

*Available water capacity to a depth of 60 inches:* 10.7 inches

*Content of organic matter in the upper 10 inches:* 5 percent

*Typical profile:*

Ap,A—0 to 14 inches; loam

Bg—14 to 20 inches; loam

Cg1-Cg4—20 to 80 inches; loam

### **Grimstad**

*Extent:* 5 percent of the unit

*Geomorphic component:* Rises on lake plains

*Slope range:* 0 to 3 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Somewhat poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 1.5 feet (April)

*Deepest depth to wet zone:* More than 6.7 feet (August)

*Ponding:* None

*Available water capacity to a depth of 60 inches:* 9.2 inches

*Content of organic matter in the upper 10 inches:* 2.8 percent

*Typical profile:*

Ap—0 to 9 inches; fine sandy loam

Bk1,Bk2—9 to 22 inches; loamy fine sand

C1—22 to 28 inches; fine sand

2C2,2C3—28 to 60 inches; loam

**Mavie**

*Extent:* 3 percent of the unit

*Geomorphic component:* Flats and swales on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 4.1 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, September, November, December

*Deepest ponding:* 0.3 foot (April, May, June, October)

*Available water capacity to a depth of 60 inches:* 7.4 inches

*Content of organic matter in the upper 10 inches:* 6 percent

*Typical profile:*

Ap—0 to 12 inches; fine sandy loam

Bk—12 to 18 inches; sandy loam

2C1,2C2—18 to 39 inches; very gravelly coarse sand

3C3—39 to 80 inches; loam

**Rosewood**

*Extent:* 3 percent of the unit

*Geomorphic component:* Flats and swales on lake plains

*Slope range:* 0 to 2 percent

*Texture of the surface layer:* Fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Poorly drained

*Parent material:* Glaciolacustrine deposits

*Flooding:* None

*Shallowest depth to wet zone:* 0.5 foot (April)

*Deepest depth to wet zone:* 4.9 feet (August)

*Months when ponding does not occur:* January, February, March, July, August, September, November, December

*Deepest ponding:* 0.3 foot (April, May, June, October)

*Available water capacity to a depth of 60 inches:* 5.6 inches

*Content of organic matter in the upper 10 inches:* 5 percent

*Typical profile:*

Ap—0 to 8 inches; fine sandy loam

Bkg1,Bkg2—8 to 18 inches; fine sandy loam

Cg1-Cg3—18 to 80 inches; fine sand

**Strathcona, depressional**

*Extent:* 3 percent of the unit

*Geomorphic component:* Depressions on lake plains

*Slope range:* 0 to 1 percent

*Texture of the surface layer:* Mucky fine sandy loam

*Depth to restrictive feature:* Very deep (more than 60 inches)

*Drainage class:* Very poorly drained

*Parent material:* Glaciolacustrine deposits over till

*Flooding:* None

*Shallowest depth to wet zone:* At the surface (March, April, May)

*Deepest depth to wet zone:* 2.5 feet (February, August)

*Shallowest ponding:* 0.3 foot (July, August, September, October)

*Deepest ponding:* 0.5 foot (January, February, March, April, May, June, November, December)

*Available water capacity to a depth of 60 inches:* 9.9 inches

*Content of organic matter in the upper 10 inches:* 10 percent

*Typical profile:*

Ap—0 to 10 inches; mucky fine sandy loam

Bkg—10 to 17 inches; loamy fine sand

Cg1—17 to 28 inches; fine sand

2Cg2,2Cg3—28 to 80 inches; loam

### **Major Uses of the Map Unit**

- Cropland, pasture, hayland

## **M-W—Miscellaneous water**

### **General Description**

- This map unit consists of bodies of water that have been constructed, including sewage lagoons, storm-water sediment basins with a permanent pool of water, and aquaculture ponds.

## **W—Water**

### **General Description**

- This map unit consists of naturally occurring bodies of water or bodies of water that have been impounded by structures in natural waterways.

Table 5.--Acreage and Proportionate Extent of the Soils

Map symbol	Soil name	Acres	Percent
B109A	Bowstring and Fluvaquents soils, MLRA 88, 0 to 2 percent slopes, frequently flooded-----	183	*
B200A	Garnes fine sandy loam, 0 to 3 percent slopes-----	35	*
B201A	Chilgren fine sandy loam, 0 to 2 percent slopes-----	116	*
B202A	Cathro muck, depressional, MLRA 88, 0 to 1 percent slopes-----	979	0.4
B203A	Northwood muck, depressional, MLRA 88, 0 to 1 percent slopes-----	164	*
B204A	Roliss loam, MLRA 88, 0 to 2 percent slopes-----	50	*
B205A	Berner muck, depressional, MLRA 88, 0 to 1 percent slopes-----	242	*
B206A	Hamre muck, depressional, MLRA 88, 0 to 1 percent slopes-----	328	0.1
I1A	Augsburg loam, 0 to 2 percent slopes-----	471	0.2
I2A	Augsburg very fine sandy loam, 0 to 2 percent slopes-----	595	0.2
I3A	Berner muck, 0 to 1 percent slopes-----	499	0.2
I4A	Berner, Rosewood, and Strathcona soils, seepy, 0 to 2 percent slopes-----	197	*
I5A	Borup loam, 0 to 2 percent slopes-----	498	0.2
I6A	Borup very fine sandy loam, 0 to 2 percent slopes-----	1,410	0.5
I7A	Bowstring-Fluvaquents complex, 0 to 2 percent slopes, frequently flooded	3,017	1.1
I8A	Cathro muck, 0 to 1 percent slopes-----	576	0.2
I9A	Clearwater clay, 0 to 2 percent slopes-----	7,686	2.8
I10A	Clearwater mucky clay loam, depressional, 0 to 1 percent slopes-----	171	*
I11A	Deerwood muck, 0 to 1 percent slopes-----	1,740	0.6
I12A	Eckvoll loamy fine sand, 0 to 3 percent slopes-----	3,154	1.1
I13A	Espelie fine sandy loam, 0 to 2 percent slopes-----	1,002	0.4
I14B	Fairdale silt loam, 1 to 6 percent slopes, occasionally flooded-----	4,575	1.7
I14D	Fairdale silt loam, 6 to 15 percent slopes, occasionally flooded-----	229	*
I15A	Flaming loamy fine sand, 0 to 3 percent slopes-----	9,575	3.5
I16F	Fluvaquents, frequently flooded-Hapludolls complex, 0 to 30 percent slopes-----	7,706	2.8
I17A	Foldahl fine sandy loam, 0 to 3 percent slopes-----	9,337	3.4
I18A	Foldahl loamy fine sand, 0 to 3 percent slopes-----	900	0.3
I19A	Foxhome sandy loam, 0 to 3 percent slopes-----	607	0.2
I20A	Foxlake loam, 0 to 2 percent slopes-----	7,567	2.7
I21A	Fram loam, 1 to 3 percent slopes-----	173	*
I22A	Glyndon loam, 0 to 2 percent slopes-----	2,111	0.8
I23A	Glyndon very fine sandy loam, 0 to 2 percent slopes-----	3,647	1.3
I24A	Grimstad fine sandy loam, 0 to 3 percent slopes-----	8,004	2.9
I25A	Hamar loamy fine sand, 0 to 2 percent slopes-----	2,571	0.9
I26A	Hamerly loam, 0 to 2 percent slopes-----	1,185	0.4
I27A	Hamre muck, 0 to 1 percent slopes-----	1,722	0.6
I28A	Hangaard sandy loam, 0 to 2 percent slopes-----	387	0.1
I29A	Hattie clay, 0 to 3 percent slopes-----	5,018	1.8
I29D	Hattie clay, 6 to 18 percent slopes-----	1,957	0.7
I30A	Hedman loam, 0 to 2 percent slopes-----	177	*
I31A	Hedman-Fram complex, 0 to 3 percent slopes-----	42	*
I32A	Hilaire fine sandy loam, 0 to 3 percent slopes-----	1,370	0.5
I33A	Hilaire loamy fine sand, 0 to 3 percent slopes-----	201	*
I34A	Huot fine sandy loam, 0 to 3 percent slopes-----	2,388	0.9
I35A	Karlsruhe sandy loam, 0 to 3 percent slopes-----	1,072	0.4
I36A	Kittson loam, 0 to 3 percent slopes-----	1,815	0.7
I37A	Kratka and Strathcona soils, depressional, 0 to 1 percent slopes-----	2,748	1.0
I38A	Kratka fine sandy loam, 0 to 2 percent slopes-----	22,800	8.2
I39A	Linveltdt fine sandy loam, 0 to 3 percent slopes-----	4,595	1.7
I40B	Maddock loamy fine sand, 1 to 6 percent slopes-----	9	*
I40F	Maddock loamy fine sand, 12 to 30 percent slopes-----	23	*
I41A	Markey muck, 0 to 1 percent slopes-----	44	*
I42A	Markey muck, ponded, 0 to 1 percent slopes-----	349	0.1
I43A	Mavie fine sandy loam, 0 to 2 percent slopes-----	1,382	0.5
I44A	Newfolden loam, 0 to 3 percent slopes-----	1,256	0.5
I45A	Northwood muck, 0 to 1 percent slopes-----	3,373	1.2
I46A	Pits, gravel and sand-----	782	0.3
I47A	Poppleton fine sand, 0 to 2 percent slopes-----	2,739	1.0

See footnote at end of table.

Table 5.--Acreage and Proportionate Extent of the Soils--Continued

Map symbol	Soil name	Acres	Percent
I48A	Radium loamy sand, 0 to 3 percent slopes-----	5,358	1.9
I49A	Rauville silty clay loam, 0 to 2 percent slopes-----	300	0.1
I50A	Reiner fine sandy loam, 0 to 3 percent slopes-----	12,526	4.5
I51A	Reiner loamy fine sand, 0 to 3 percent slopes-----	175	*
I52A	Reis-Clearwater complex, 0 to 2 percent slopes-----	7,575	2.7
I53A	Roliss loam, 0 to 2 percent slopes-----	4,342	1.6
I54A	Roliss loam, depressional, 0 to 1 percent slopes-----	800	0.3
I55A	Rosewood fine sandy loam, 0 to 2 percent slopes-----	6,856	2.5
I56A	Rosewood-Venlo complex, 0 to 1 percent slopes-----	192	*
I57B	Sandberg-Radium complex, 1 to 6 percent slopes-----	1,684	0.6
I58A	Seelyeville muck, 0 to 1 percent slopes-----	37	*
I59A	Smiley loam, 0 to 2 percent slopes-----	48,481	17.5
I60A	Smiley mucky loam, depressional, 0 to 1 percent slopes-----	1,585	0.6
I61A	Strandquist loam, 0 to 2 percent slopes-----	1,055	0.4
I62A	Syrene sandy loam, 0 to 2 percent slopes-----	1,108	0.4
I63A	Thiefriever fine sandy loam, 0 to 2 percent slopes-----	1,339	0.5
I64A	Ulen fine sandy loam, 0 to 3 percent slopes-----	1,300	0.5
I65A	Ulen loamy fine sand, 0 to 3 percent slopes-----	7,611	2.7
I66A	Vallers loam, 0 to 2 percent slopes-----	9,651	3.5
I67A	Wheatville loam, 0 to 3 percent slopes-----	3,160	1.1
I68A	Wheatville very fine sandy loam, 0 to 3 percent slopes-----	702	0.3
I69A	Wyandotte clay loam, 0 to 2 percent slopes-----	372	0.1
I70A	Strathcona fine sandy loam, 0 to 2 percent slopes-----	22,271	8.0
M-W	Miscellaneous water-----	87	*
W	Water-----	884	0.3
	Total-----	277,000	100.0

\* Less than 0.1 percent.



# Use and Management of the Soils

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This soil survey is an inventory and evaluation of the soils in the survey area. It can be used to adjust land uses to the limitations and potentials of natural resources and the environment. Also, it can help to prevent soil-related failures in land uses.

In preparing a soil survey, soil scientists, conservationists, engineers, and others collect extensive field data about the nature and behavioral characteristics of the soils. They collect data on erosion, droughtiness, flooding, and other factors that affect various soil uses and management. Field experience and collected data on soil properties and performance are used as a basis in predicting soil behavior.

Information in this section can be used to plan the use and management of soils for crops and pasture; as forest land; as sites for buildings, highways and other transportation systems, and parks and other recreational facilities; and as wildlife habitat. It can be used to identify the potentials and limitations of each soil for specific land uses and to help prevent construction failures caused by unfavorable soil properties.

Planners and others using soil survey information can evaluate the effect of specific land uses on productivity and on the environment in all or part of the survey area. The survey can help planners to maintain or create a land use pattern in harmony with the natural soil.

Contractors can use this survey to locate sources of sand and gravel, roadfill, and topsoil. They can use it to identify areas where bedrock, wetness, or very firm soil layers can cause difficulty in excavation.

Health officials, highway officials, engineers, and others may also find this survey useful. The survey can help them plan the safe disposal of wastes and locate sites for pavements, sidewalks, campgrounds, playgrounds, lawns, and trees and shrubs.

## Interpretive Ratings

The interpretive tables in this survey rate the soils in the survey area for various uses. Many of the tables identify the limitations that affect specified uses and indicate the severity of those limitations. The ratings in these tables are both verbal and numerical.

## Rating Class Terms

Rating classes are expressed in the tables in terms that indicate the extent to which the soils are limited by all of the soil features that affect a specified use or in terms that indicate the suitability of the soils for the use. Thus, the tables may show limitation classes or suitability classes. Terms for the limitation classes are *not limited*, *somewhat limited*, and *very limited*. The suitability ratings are expressed as *well suited*, *moderately suited*, *poorly suited*, and *unsuited* or as *good*, *fair*, and *poor*.

## Numerical Ratings

Numerical ratings in the tables indicate the relative severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.00 to 1.00. They indicate

gradations between the point at which a soil feature has the greatest negative impact on the use and the point at which the soil feature is not a limitation. The limitations appear in order from the most limiting to the least limiting. Thus, if more than one limitation is identified, the most severe limitation is listed first and the least severe one is listed last.

## Crops and Pasture

General management needed for crops and for hay and pasture is suggested in this section. The estimated yields of the main crops and hay and pasture plants are listed, the system of land capability classification used by the Natural Resources Conservation Service is explained, and prime farmland is described.

About 72 percent of Red Lake County is cultivated. In 1998, the principal crops grown were spring wheat, soybeans, barley, corn, and sunflowers. Alfalfa and other hay crops were planted on about 24,700 acres. Small acreages were planted to oats, potatoes, canola, and sugar beets (Hunst and Howse, 1999).

Planners of management systems for individual fields or farms should consider obtaining specific information from the local office of the Natural Resources Conservation Service or the Cooperative Extension Service.

## Cropland Management Considerations

Shawnn Balstad, district conservationist, Natural Resources Conservation Service, helped prepare this section.

The management concerns affecting the use of the soil map units in the survey area for crops are shown in table 6. The main concerns in managing nonirrigated cropland are conserving moisture, controlling wind erosion and water erosion, and maintaining soil fertility and tilth.

*Conserving moisture* consists primarily of reducing the evaporation and runoff rates and increasing the water infiltration rate. Adequate moisture at planting time is critical to the success of the crop during the growing season. Conserving moisture is most important in areas of excessively drained and moderately well drained, sandy soils, such as Sandberg, Radium, and Flaming soils. Applying conservation tillage and conservation cropping systems, farming on the contour, stripcropping, establishing field windbreaks, and leaving crop residue on the surface conserve moisture.

*Wind erosion* is a hazard on many of the soils in Red Lake County. It can be a severe hazard in areas of coarse textured soils, such as Poppleton, Flaming, and Foldahl soils. It is also a hazard in areas of Grimstad and Glyndon soils. These soils have a relatively high content of lime and are susceptible to wind erosion in the spring if they have been left bare throughout the winter. Because of freezing and thawing, soil structure can break down. The result is soil aggregates that are susceptible to movement.

*Water erosion* is a hazard in gently rolling to steep areas, especially if the surface of the soil is left bare. Fairdale and Hattie soils are examples of soils that are susceptible to water erosion.

Generally, a combination of several practices is needed to control wind erosion and water erosion. Conservation tillage, stripcropping, field windbreaks, contour farming, conservation cropping systems, crop residue management, terraces, diversions, and grassed waterways help to prevent excessive soil loss.

Measures that are effective in maintaining *soil fertility* include applying fertilizer, both organic and inorganic, including manure; incorporating crop residue or green manure crops into the soil; and using proper crop rotations. Controlling erosion helps to prevent the loss of organic matter and plant nutrients and thus helps to maintain

productivity. The loss of organic matter affects soil structure, the rate of water infiltration, available water capacity, and tilth.

Measures that maintain good tilth are especially important in areas of Clearwater and Hattie soils, which have a surface layer of clay. Planting cover crops in fallow fields and leaving a cover of crop residue on the surface can help to maintain soil tilth. Minimizing field traffic during wet periods helps to prevent soil compaction.

Some of the considerations shown in table 6 cannot be easily overcome. These are channels, flooding, gullies, and ponding.

Additional considerations are as follows:

*Lime content, limited available water capacity, limited content of organic matter, potential poor tilth and compaction, and restricted permeability.*—These limitations can be minimized by incorporating green manure crops, manure, or crop residue into the soil; applying a system of conservation tillage; and using conservation cropping systems. Also, crops may respond well to additions of phosphate fertilizer to soils that have a high content of lime.

*Potential for ground-water contamination.*—The proper use of nutrients and pesticides can reduce the risk of ground-water contamination.

*Potential for surface-water contamination.*—The risk of surface-water contamination can be reduced by the proper use of nutrients and pesticides and by conservation farming practices that reduce the runoff rate.

*Surface crusting.*—This limitation retards seedling development after periods of heavy rainfall.

*Surface rock fragments.*—This limitation causes rapid wear of tillage equipment. It cannot be easily overcome.

*Surface stones.*—Stones or boulders on or near the surface can hinder normal tillage unless they are removed.

*Salt content.*—In areas where this is a limitation, only salt-tolerant crops should be grown.

On irrigated soils the main management concerns are efficient water use, nutrient management, control of erosion, pest and weed control, and timely planting and harvesting for a successful crop. An irrigation system that provides optimum control and distribution of water at minimum cost is needed. Overirrigation wastes water, leaches plant nutrients, and causes erosion. Also, it can increase wetness and soil salinity.

### **Explanation of Criteria**

*Acid soil.*—The pH is less than 6.1.

*Channeled.*—The word “channeled” is included in the map unit name.

*Dense layer.*—The bulk density is 1.80 g/cc or greater within the soil profile.

*Depth to rock.*—The depth to bedrock is less than 40 inches.

*Eroded.*—The word “eroded” is included in the map unit name.

*Excessive permeability.*—Saturated hydraulic conductivity is 42 micrometers per second or more within the soil profile.

*Flooding.*—Flooding is occasional, frequent, or very frequent.

*Gullied.*—The word “gullied” is included in the map unit name.

*High content of organic matter.*—The surface layer has more than 20 percent organic matter.

*Lime content.*—The pH is 7.4 or more in the surface layer, or the wind erodibility group is 4L.

*Limited available water capacity.*—The available water capacity calculated to a depth of 60 inches or to a root-limiting layer is 6 inches or less.

*Limited content of organic matter.*—The content of organic matter is 2 percent or less in the surface layer.

*Ponding.*—Ponding duration is assigned to the soil. Water is above the surface.

*Potential poor tilth and compaction.*—The content of clay is 27 percent or more in the surface layer.

*Potential for ground-water contamination* (by nutrients or pesticides).—The depth to a zone in which the soil moisture status is wet is 4 feet or less, the saturated hydraulic conductivity of any layer is more than 42 micrometers per second, or the depth to bedrock is less than 60 inches.

*Potential for surface-water contamination* (by nutrients or pesticides).—The soil is occasionally, frequently, or very frequently flooded, is subject to ponding, is assigned to hydrologic group C or D and has a slope of more than 2 percent, is assigned to hydrologic group A and has a slope of more than 6 percent, or is assigned to hydrologic group B, has a slope of 3 percent or more, and has a K factor of more than 0.17.

*Previously eroded.*—The word “eroded” is included in the map unit name.

*Restricted permeability.*—Saturated hydraulic conductivity is less than 0.42 micrometer per second within the soil profile.

*Salt content.*—The electrical conductivity is 4 or more in the surface layer or 8 or more within a depth of 30 inches.

*Slope* (equipment limitation).—The slope is more than 15 percent.

*Surface crusting.*—The content of clay is 27 percent or more and the content of organic matter is 2 percent or less in the surface layer.

*Surface rock fragments* (equipment limitation).—The terms describing the texture of the surface layer include any rock fragment modifier, except for gravelly, channery, stony, very stony, extremely stony, bouldery, very bouldery, and extremely bouldery.

*Surface stones* (equipment limitation).—The word “stony” or “bouldery” is included in the description of the surface layer, or 0.01 percent or more of the surface is covered by boulders.

*Water erosion.*—Either the slope is 6 percent or more, or the slope is more than 3 percent and less than 6 percent and the surface layer is not sandy.

*Wet soil moisture status.*—A zone in which the soil moisture status is wet is within 2.5 feet of the surface.

*Wind erosion.*—The wind erodibility group is 1, 2, 3, or 4L.

Erosion factors (e.g., K factor) and wind erodibility groups are described under the heading “Physical and Chemical Properties.”

## Crop Yield Estimates

The average yields per acre that can be expected of the principal crops and hay and pasture plants under a high level of management are shown in table 7. In any given year, yields may be higher or lower than those indicated in the table because of variations in rainfall and other climatic factors. The land capability classification of the soils in the survey area also is shown in the table.

The yields are based mainly on the experience and records of farmers, conservationists, and extension agents. Available yield data from nearby counties and results of field trials and demonstrations also are considered.

The management needed to obtain the indicated yields of the various crops depends on the kind of soil and the crop. Management can include drainage, erosion control, and protection from flooding; the proper planting and seeding rates; suitable high-yielding crop varieties; appropriate and timely tillage; control of weeds, plant diseases, and harmful insects; favorable soil reaction and optimum levels of nitrogen, phosphorus, potassium, and trace elements for each crop; effective use of crop residue, barnyard manure, and green manure crops; and harvesting that ensures the smallest possible loss.

The estimated yields reflect the productive capacity of each soil for each of the principal crops. Yields are likely to increase as new production technology is developed. The productivity of a given soil compared with that of other soils, however, is not likely to change.

Crops other than those shown in the table are grown in the survey area, but estimated yields are not listed because the acreage of such crops is small. The local office of the Natural Resources Conservation Service or of the Cooperative Extension Service can provide information about the management and productivity of the soils for those crops.

### **Pasture and Hayland Interpretations**

Soils are assigned to forage suitability groups according to their suitability for the production of forage vegetation. The soils in each group are similar enough to be suited to the same species of grasses or legumes, have similar limitations and hazards, require similar management, and have similar productivity levels and other responses to management. The forage suitability groups of the soils in the survey area are listed in table 8. Detailed descriptions of forage suitability groups are available at local offices of the Natural Resources Conservation Service.

Under good management, proper grazing is essential for the production of high-quality forage, stand survival, and erosion control. Proper grazing helps plants to maintain sufficient and generally vigorous top growth during the growing season. Brush control is essential in many areas, and weed control generally is needed. Rotation grazing and renovation also are important management practices.

Yield estimates are often provided in animal unit months (AUM), or the amount of forage or feed required to feed one animal unit (one cow, one horse, one mule, five sheep, or five goats) for 30 days.

The local office of the Natural Resources Conservation Service or of the Cooperative Extension Service can provide information about forage yields other than those shown in table 7.

### **Land Capability Classification**

Land capability classification shows, in a general way, the suitability of soils for most kinds of field crops. Crops that require special management are excluded. The soils are grouped according to their limitations for field crops, the risk of damage if they are used for crops, and the way they respond to management. The criteria used in grouping the soils do not take into account major and generally expensive landforming that would change slope, depth, or other characteristics of the soils, nor do they include possible but unlikely major reclamation projects. Capability classification is not a substitute for interpretations designed to show suitability and limitations of groups of soils for woodland or for engineering purposes.

In the capability system, soils generally are grouped at three levels—capability class, subclass, and unit (USDA, 1961). These categories indicate the degree and kinds of limitations affecting mechanized farming systems that produce the more commonly grown field crops, such as corn, small grain, cotton, hay, and field-grown vegetables. Only class and subclass are used in this survey.

*Capability classes*, the broadest groups, are designated by the numbers 1 through 8. The numbers indicate progressively greater limitations and narrower choices for practical use.

If properly managed, soils in classes 1, 2, 3, and 4 are suitable for the mechanized production of commonly grown field crops and for pasture and woodland. The degree of the soil limitations affecting the production of cultivated crops increases progressively from class 1 to class 4. The limitations can affect levels of production and the risk of permanent soil deterioration caused by erosion and other factors.

Soils in classes 5, 6, and 7 are generally not suited to the mechanized production of commonly grown field crops without special management, but they are suitable for plants that provide a permanent cover, such as grasses and trees. The severity of the soil limitations affecting crops increases progressively from class 5 to class 7.

Areas in class 8 are generally not suitable for crops, pasture, or woodland without a level of management that is impractical. These areas may have potential for other uses, such as recreational facilities and wildlife habitat.

*Capability subclasses* identify the dominant kind of limitation in the class. They are designated by adding a small letter, *e*, *w*, *s*, or *c*, to the class numeral, for example, 2*e*. The letter *e* shows that the main hazard is the risk of erosion unless a close-growing plant cover is maintained; *w* shows that water in or on the soil interferes with plant growth or cultivation (in some soils the wetness can be partly corrected by artificial drainage); *s* shows that the soil is limited mainly because it is shallow, droughty, or stony; and *c*, used in only some parts of the United States, shows that the chief limitation is climate that is very cold or very dry.

There are no subclasses in class 1 because the soils of this class have few limitations. Class 5 contains only the subclasses indicated by *w*, *s*, or *c* because the soils in class 5 are subject to little or no erosion. They have other limitations that restrict their use mainly to pasture, woodland, wildlife habitat, or recreation.

The capability classification of the soils in the survey area is given in the yields table.

## Prime Farmland

Prime farmland is of major importance in meeting the Nation's short- and long-range needs for food and fiber. The acreage of high-quality farmland is limited, and the U.S. Department of Agriculture recognizes that government at local, State, and Federal levels, as well as individuals, must encourage and facilitate the wise use of our Nation's prime farmland.

Prime farmland soils, as defined by the U.S. Department of Agriculture, are soils that are best suited to food, feed, forage, fiber, and oilseed crops. Such soils have properties that favor the economic production of sustained high yields of crops. The soils need only to be treated and managed by acceptable farming methods. An adequate moisture supply and a sufficiently long growing season are required. Prime farmland soils produce the highest yields with minimal expenditure of energy and economic resources, and farming these soils results in the least damage to the environment.

Prime farmland soils may presently be used as cropland, pasture, or woodland or for other purposes. They either are used for food and fiber or are available for these uses. Urban or built-up land, public land, and water areas cannot be considered prime farmland. Urban or built-up land is any contiguous unit of land 10 acres or more in size that is used for such purposes as housing, industrial, and commercial sites, sites for institutions or public buildings, small parks, golf courses, cemeteries, railroad yards, airports, sanitary landfills, sewage treatment plants, and water-control structures. Public land is land not available for farming in National forests, National parks, military reservations, and State parks.

Prime farmland soils commonly receive an adequate and dependable supply of moisture from precipitation or irrigation. The temperature and growing season are favorable, and the level of acidity or alkalinity and the content of salts and sodium are acceptable. The soils have few, if any, rocks and are permeable to water and air. They are not excessively erodible or saturated with water for long periods, and they are not

frequently flooded during the growing season or are protected from flooding. Slopes range mainly from 0 to 6 percent.

Soils in which a zone with a wet soil moisture status is high in the profile or soils that are subject to flooding may qualify as prime farmland where these limitations are overcome by drainage measures or flood control. Onsite evaluation is necessary to determine the effectiveness of corrective measures. More information about the criteria for prime farmland can be obtained at the local office of the Natural Resources Conservation Service.

A recent trend in land use has been the conversion of prime farmland to urban and industrial uses. The loss of prime farmland to other uses puts pressure on lands that are less productive than prime farmland.

About 189,000 acres, or nearly 70 percent of the survey area, meets the requirements for prime farmland.

The map units in the survey area that meet the requirements for prime farmland are listed in table 9. This list does not constitute a recommendation for a particular land use. On some soils included in the table, measures that overcome limitations are needed. The need for these measures is indicated in parentheses after the map unit name. The location of each map unit is shown on the soil maps. The soil qualities that affect use and management are described in the section "Soil Map Unit Descriptions."

## Windbreaks and Environmental Plantings

Windbreaks protect livestock, buildings, and yards from wind and snow. They also protect fruit trees and gardens, and they furnish habitat for wildlife. Several rows of low- and high-growing broadleaf and coniferous trees and shrubs provide the most protection.

Field windbreaks are narrow plantings made at right angles to the prevailing wind and at specific intervals across the field. The interval depends on the erodibility of the soil. Field windbreaks protect cropland and crops from wind, help to keep snow on the fields, and provide food and cover for wildlife.

Environmental plantings help to beautify and screen houses and other buildings and to abate noise. The plants, mostly evergreen shrubs and trees, are closely spaced. To ensure plant survival, a healthy planting stock of suitable species should be planted properly on a well prepared site and maintained in good condition.

Windbreaks are often planted on land that did not originally support trees. Knowledge of how trees perform on such land can be gained only by observing and recording the performance of trees that have been planted and have survived. Many popular windbreak species are not indigenous to the areas in which they are planted.

Each tree or shrub species has certain climatic and physiographic limits. Within these parameters, a tree or shrub may grow well or grow poorly, depending on the characteristics of the soil. Each tree or shrub has definable potential heights in a given physiographic area and under a given climate. Accurate definitions of potential heights are necessary when a windbreak is planned and designed.

Table 10 shows the height that locally grown trees and shrubs are expected to reach in 20 years on various soils. The estimates in this table are based on measurements and observation of established plantings that have been given adequate care. They can be used as a guide in planning windbreaks and screens. Additional information on planning windbreaks and screens and planting and caring for trees and shrubs can be obtained from local offices of the Natural Resources Conservation Service or the Cooperative Extension Service or from a nursery.

## Hybrid Poplar Ratings

Wendell Johnson, University of Minnesota, Crookston, and Ed Wene, Agriculture Utilization and Research Institute, helped prepare this section.

Hybrid poplars are grown as an alternative crop or as a practice called “short rotation forestry.” The trees grow rapidly and have the ability to produce high yields for fuel, pulp, and a variety of wood products. Poplars can also protect soils from wind erosion and water erosion and prevent the runoff of nutrients into streams. Proper site selection, site preparation, selection of planting stock, fertilization, and weed control are important for a successful crop.

Hybrid poplars grow well under a wide range of environmental conditions, but the prairie-forest fringe area generally has the most desirable soil and climatic conditions. Hybrid poplar performs best on medium textured soils that have good fertility and that have reaction ranging from medium acid to slightly alkaline. Ample moisture is especially important during the establishment of the crop. The plants are tolerant of wet soils and standing water for short periods of time. Rock fragments on the surface are a limitation in localized areas of the till-derived soils. This feature can present additional expense in site preparation and equipment wear. Water erosion and wind erosion may be hazards, especially when a new crop is being established.

Table 11 lists factors that affect the soils for the growth of hybrid poplars. The soils were evaluated using the most current data available. The factors considered include acidity, lime content, available water capacity, content of organic matter, permeability, potential for surface-water and ground-water contamination, ponding, slope, and a zone in which the soil moisture status is wet. Further information is available at the University of Minnesota Northwest Research and Outreach Center and the Agriculture Utilization and Research Institute in Crookston, Minnesota.

The following paragraphs provide an explanation of the factors considered and the criteria used in evaluating the soils.

*Acid soil.*—The pH is less than 5.6. If the pH of a mineral soil is low, some plant nutrients may become unavailable and others become so soluble that they become toxic to plants.

*High content of organic matter.*—The content of organic matter in the upper 20 inches is more than 8 percent. Organic soils and mineral soils that have a high content of organic matter can make site preparation difficult, reduce cutting survival by desiccation, inhibit herbicide performance, and increase the likelihood of windthrow.

*Lime content.*—The pH is 7.9 or more, or the calcium carbonate equivalent is 15 percent or more in the upper 20 inches. The availability and uptake of some plant nutrients can be restricted.

*Limited available water capacity.*—The available water capacity calculated to a depth of 60 inches or to a root-limiting layer is 9 inches or less. Adequate moisture is especially important to ensure cutting survival and good root development.

*Limited content of organic matter.*—The content of organic matter in the upper 6 inches is 1 percent or less. Sufficient organic matter improves tilth and increases fertility.

*Ponding.*—Ponding duration is more than 4 days during the period from June through August. Water is above the surface.

*Potential for ground-water contamination (by nutrients or pesticides).*—The depth to a zone in which the soil moisture status is wet is 4 feet or less, the saturated hydraulic conductivity of any layer is more than 42 micrometers per second, or the depth to bedrock is less than 60 inches.

*Potential for surface-water contamination (by nutrients or pesticides).*—The soil is occasionally flooded or frequently flooded, is subject to ponding, is assigned to hydrologic group C or D and has a slope of more than 2 percent, is assigned to

hydrologic group A and has a slope of more than 6 percent, or is assigned to hydrologic group B, has a slope of 3 percent or more, and has a K factor of more than 0.17.

*Restricted permeability.*—Saturated hydraulic conductivity is less than 1.4 micrometer per second within the top 20 inches of the soil profile. In soils that have a high content of clay, root development may be limited and the movement of water and nutrients may be restricted.

*Slope.*—The slope is more than 4 percent.

*Water erosion.*—Either the slope is 6 percent or more, or the slope is more than 3 percent and less than 6 percent and the surface layer is not sandy.

*Wet soil moisture status.*—A zone in which the soil moisture status is wet is within 10 inches of the surface during the growing season.

*Wind erosion.*—The wind erodibility group is 1, 2, 3, or 4L.

## Forest Land Management and Productivity

The tables in this section can help forest owners or managers plan the use of soils for wood crops. They show the potential productivity of the soils for wood crops and describe the limitations that affect various aspects of forest management.

### Forest Land Harvest Equipment Considerations

Table 12 provides information regarding the use of harvest equipment in areas used as forest land.

For most soils, spring is the most limiting season because of alternate thawing and freezing during snowmelt, causing saturation and low strength of the surface soil layers. When thawing is complete, saturation continues for short periods in well drained soils to nearly all year in very poorly drained depressional soils. Degrees of wetness are generally proportionate to depth to and duration of a zone in which the soil moisture status is wet. Zones of wet soil moisture status generally are lower in the summer during the heavy use of moisture by vegetation and are nearer to the surface during periods when absorbed precipitation is greater than the vegetative requirements. Harvesting during periods of saturation usually results in severe soil damage, except when the soil is frozen. The preferred season for timber harvest on many soils is winter, when wetness and low soil strength can be overcome by freezing.

Considerations shown in the table are as follows:

*Slope.*—The upper limit of the slope range is more than 15 percent.

*Flooding.*—The soil is frequently flooded.

*Wetness.*—The soil is somewhat poorly drained, poorly drained, or very poorly drained or has a perched zone in which the soil moisture status is wet (any drainage class).

*Depth to hard rock.*—The depth to hard bedrock is less than 10 inches.

*Rubbly surface.*—The word “rubbly” is in the map unit name.

*Surface stones.*—The words “extremely stony” are included in the description of the surface layer, or 3 percent or more of the surface is covered with stones.

*Surface boulders.*—The word “bouldery” is included in the description of the surface layer, or 0.01 percent or more of the surface is covered with boulders.

*Areas of rock outcrop.*—The words “Rock outcrop” are in the map unit name.

*Susceptible to rutting and wheel slippage (low strength).*—The AASHTO classification is A-6, A-7, or A-8 in any layer within a depth of 20 inches.

*Poor traction (loose sandy material).*—The USDA texture includes sand or loamy sand in any layer within a depth of 10 inches.

## Forest Haul Road Considerations

Table 13 provides information regarding the use of the soils as haul roads. Haul roads serve as transportation routes from log landings to primary roads. Generally, haul roads are unpaved, but some are graveled.

Considerations shown in the table are as follows:

*Slope.*—The slope is 8 percent or more.

*Flooding.*—The soil is frequently flooded.

*Wetness.*—The soil is somewhat poorly drained, poorly drained, or very poorly drained or has a perched zone in which the soil moisture status is wet (any drainage class).

*Depth to hard rock.*—The depth to hard bedrock is less than 20 inches.

*Depth to soft rock.*—The depth to soft bedrock is less than 20 inches.

*Surface boulders.*—The word “bouldery” is included in the description of the surface layer, or 0.01 percent or more of the surface is covered with boulders.

*Areas of rock outcrop.*—The words “Rock outcrop” are in the map unit name.

*Low bearing strength.*—The AASHTO classification is A-6, A-7, or A-8 in any layer within a depth of 20 inches.

*Rubby surface.*—The word “rubby” is in the map unit name.

## Forest Log Landing Considerations

Table 14 provides information regarding the use of the soils as log landings. Log landings are areas where logs are assembled for transportation. Areas that require little or no cutting, filling, or surface preparation are desired.

Considerations shown in the table are as follows:

*Slope.*—The slope is more than 6 percent.

*Flooding.*—The soil is occasionally flooded or frequently flooded.

*Wetness.*—The soil is somewhat poorly drained, poorly drained, or very poorly drained or has a perched zone in which the soil moisture status is wet (any drainage class).

*Surface boulders.*—The word “bouldery” is included in the description of the surface layer, or 0.01 percent or more of the surface is covered with boulders.

*Areas of rock outcrop.*—The words “Rock outcrop” are in the map unit name.

*Susceptible to rutting and wheel slippage (low strength).*—The AASHTO classification is A-6, A-7, or A-8 in any layer within a depth of 20 inches.

*Rubby surface.*—The word “rubby” is in the map unit name.

## Forest Land Site Preparation and Planting Considerations

Table 15 provides information regarding considerations affecting site preparation and planting in areas used as forest land.

Considerations shown in the table are as follows:

*Slope.*—The upper limit of the slope range is more than 15 percent.

*Flooding.*—The soil is frequently flooded.

*Wetness.*—The soil is somewhat poorly drained, poorly drained, or very poorly drained or has a perched zone in which the soil moisture status is wet (any drainage class).

*Depth to hard rock.*—The depth to hard bedrock is less than 20 inches.

*Surface stones.*—The word “stony” is included in the description of the surface layer, or 0.01 percent or more of the surface is covered with stones.

*Surface boulders.*—The word “bouldery” is included in the description of the surface layer, or 0.01 percent or more of the surface is covered with boulders.

*Areas of rock outcrop.*—The words “Rock outcrop” are in the map unit name.

*Water erosion.*—The slope is 8 percent or more.

*Potential poor tilth and compaction.*—The AASHTO classification is A-6 or A-7 in the upper 10 inches.

*Rubbly surface.*—The word “rubbly” is in the map unit name.

*Cobbly surface.*— The word “cobbly” is included in the description of the surface layer, or 0.1 percent or more of the surface is covered with cobbles.

## Forest Productivity

Information about the potential productivity of soils for merchantable or common trees is provided in table 16.

The *potential productivity* of a soil is expressed as a site index and as a volume number.

The *site index* is the average height, in feet, that dominant and codominant trees of a given species attain in a specified number of years. The site index applies to fully stocked, even-aged, unmanaged stands. Commonly grown trees are those that woodland managers generally favor in intermediate or improvement cuttings. They are selected on the basis of growth rate, quality, value, and marketability.

The *volume of wood fiber*, a number, is the yield likely to be produced by the most important trees. This number, expressed as cubic feet per acre per year, indicates the amount of wood fiber produced in a fully stocked, even-aged stand.

*Trees to manage* are those that are suitable for commercial wood production.

## Recreation

The soils of the survey area are rated in tables 17a and 17b according to limitations that affect their suitability for recreation. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the recreational uses.

*Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected.

*Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected.

*Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

The ratings in the tables are based on restrictive soil features, such as wetness, slope, and texture of the surface layer. Susceptibility to flooding is considered. Not considered in the ratings, but important in evaluating a site, are the location and accessibility of the area, the size and shape of the area and its scenic quality, vegetation, access to water, potential water impoundment sites, and access to public sewer lines. The capacity of the soil to absorb septic tank effluent and the ability of the soil to support vegetation also are important. Soils that are subject to flooding are limited for recreational uses by the duration and intensity of flooding and the season when flooding occurs. In planning recreational facilities, onsite assessment of the height, duration, intensity, and frequency of flooding is essential.

The information in the tables can be supplemented by other information in this

survey, for example, interpretations for building site development, construction materials, and water management.

*Camp areas* require site preparation, such as shaping and leveling the tent and parking areas, stabilizing roads and intensively used areas, and installing sanitary facilities and utility lines. Camp areas are subject to heavy foot traffic and some vehicular traffic. The ratings are based on the soil properties that affect the ease of developing camp areas and the performance of the areas after development. Slope, stoniness, and depth to bedrock or a cemented pan are the main concerns affecting the development of camp areas.

The soil properties that affect the performance of the areas after development are those that influence trafficability and promote the growth of vegetation, especially in heavily used areas. For good trafficability, the surface of camp areas should absorb rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a zone in which the soil moisture status is wet, ponding, flooding, permeability, and large stones. The soil properties that affect the growth of plants are depth to bedrock or a cemented pan, permeability, and toxic substances in the soil.

*Picnic areas* are subject to heavy foot traffic. Most vehicular traffic is confined to access roads and parking areas. The ratings are based on the soil properties that affect the ease of developing picnic areas and that influence trafficability and the growth of vegetation after development. Slope and stoniness are the main concerns affecting the development of picnic areas. For good trafficability, the surface of picnic areas should absorb rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a zone in which the soil moisture status is wet, ponding, flooding, permeability, and large stones. The soil properties that affect the growth of plants are depth to bedrock or a cemented pan, permeability, and toxic substances in the soil.

*Playgrounds* require soils that are nearly level, are free of stones, and can withstand intensive foot traffic. The ratings are based on the soil properties that affect the ease of developing playgrounds and that influence trafficability and the growth of vegetation after development. Slope and stoniness are the main concerns affecting the development of playgrounds. For good trafficability, the surface of the playgrounds should absorb rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a zone in which the soil moisture status is wet, ponding, flooding, permeability, and large stones. The soil properties that affect the growth of plants are depth to bedrock or a cemented pan, permeability, and toxic substances in the soil.

*Paths and trails* for hiking and horseback riding should require little or no slope modification through cutting and filling. The ratings are based on the soil properties that affect trafficability and erodibility. These properties are stoniness, depth to a zone in which the soil moisture status is wet, ponding, flooding, slope, and texture of the surface layer.

*Off-road motorcycle trails* require little or no site preparation. They are not covered with surfacing material or vegetation. Considerable compaction of the soil material is likely. The ratings are based on the soil properties that influence erodibility, trafficability, dustiness, and the ease of revegetation. These properties are stoniness, slope, depth to a zone in which the soil moisture status is wet, ponding, flooding, and texture of the surface layer.

*Golf fairways* are subject to heavy foot traffic and some light vehicular traffic. Cutting or filling may be required. Irrigation is not considered in the ratings. The ratings are based on the soil properties that affect plant growth and trafficability after vegetation is established. The properties that affect plant growth are reaction; depth to a zone in which the soil moisture status is wet; ponding; depth to bedrock or a cemented pan;

the available water capacity in the upper 40 inches; the content of salts, sodium, or calcium carbonate; and sulfidic materials. The properties that affect trafficability are flooding, depth to a zone in which the soil moisture status is wet, ponding, slope, stoniness, and the amount of sand, clay, or organic matter in the surface layer. The suitability of the soil for traps, tees, roughs, and greens is not considered in the ratings.

## Wildlife Habitat

Soils affect the kind and amount of vegetation that is available to wildlife as food and cover. They also affect the construction of water impoundments. If food, cover, or water is missing, inadequate, or inaccessible, wildlife will be scarce or will not inhabit the area.

If the soils have potential for habitat development, wildlife habitat can be created or improved by planting appropriate vegetation, properly managing the existing plant cover, and fostering the natural establishment of desirable plants.

In table 18, the soils in the survey area are rated according to their potential for providing habitat for various kinds of wildlife. This information can be used in planning parks, wildlife refuges, nature study areas, and other developments for wildlife; in selecting soils that are suitable for establishing, improving, or maintaining specific elements of wildlife habitat; and in determining the intensity of management needed for each element of the habitat.

The potential of the soil is rated good, fair, poor, or very poor. A rating of *good* indicates that the element or kind of habitat is easily established, improved, or maintained. Few or no limitations affect management, and satisfactory results can be expected. A rating of *fair* indicates that the element or kind of habitat can be established, improved, or maintained in most places. Moderately intensive management is required for satisfactory results. A rating of *poor* indicates that limitations are severe for the designated element or kind of habitat. Habitat can be created, improved, or maintained in most places, but management is difficult and must be intensive. A rating of *very poor* indicates that restrictions for the element or kind of habitat are very severe and that unsatisfactory results can be expected. Creating, improving, or maintaining habitat is impractical or impossible.

The elements of wildlife habitat are described in the following paragraphs.

*Grain and seed crops* are domestic grains and seed-producing herbaceous plants used by wildlife. Examples are corn, soybeans, wheat, oats, and barley.

*Grasses and legumes* are domestic perennial grasses and herbaceous legumes planted for wildlife food and cover. Examples are bromegrass, timothy, orchardgrass, clover, alfalfa, wheatgrass, and birdsfoot trefoil.

*Wild herbaceous plants* are native or naturally established grasses and forbs, including weeds, that provide food and cover for wildlife. Examples are bluestems, indiagrass, blueberry, goldenrod, lambsquarters, dandelions, blackberry, ragweed, wheatgrass, and nightshade.

The major soil properties affecting the growth of grain and forage crops and wild herbaceous plants are depth of the root zone, texture of the surface layer, the amount of water available to plants, wetness, salinity, and flooding. The length of the growing season also is important.

*Hardwood trees* and woody understory produce nuts or other fruit, buds, catkins, twigs, bark, and foliage that wildlife eat. Examples are oak, poplar, box elder, birch, maple, green ash, willow, and American elm.

*Coniferous plants* are cone-bearing trees, shrubs, or ground cover that provide habitat or supply food in the form of browse, seed, or fruit-like cones. Examples are pine, spruce, cedar, and tamarack.

The major soil properties affecting the growth of hardwood and coniferous trees and

shrubs are depth of the root zone, the amount of water available to plants, and wetness.

*Shrubs* are bushy woody plants that produce fruit, buds, twigs, bark, and foliage. Soil properties and features that affect the growth of shrubs are depth of the root zone, available water capacity, salinity, and soil moisture. Examples of shrubs are hawthorn, honeysuckle, American plum, redosier dogwood, chokecherry, highbush cranberry, elderberry, gooseberry, serviceberry, silver buffaloberry, and crabapple.

*Wetland plants* are annual and perennial wild herbaceous plants that grow on moist or wet sites. Submerged or floating aquatic plants are excluded. Wetland plants produce food or cover for wetland wildlife. Examples of these plants are smartweeds, wild millet, rushes, sedges, bulrushes, wild rice, arrowhead, waterplantain, cattail, prairie cordgrass, bluejoint grass, asters, and beggarticks.

The major soil properties affecting wetland plants are texture of the surface layer, wetness, acidity or alkalinity, and slope.

*Shallow water areas* have an average depth of less than 5 feet. They are useful as habitat for some wildlife species. They are naturally wet areas or are created by dams, levees, or water-control measures in marshes or streams. Examples are waterfowl feeding areas, wildlife watering developments, beaver ponds, and other wildlife ponds.

The major soil properties affecting shallow water areas are depth to bedrock, wetness, surface stoniness, slope, and permeability.

The habitat for various kinds of wildlife is described in the following paragraphs.

*Habitat for openland wildlife* consists of cropland, pasture, meadows, and areas that are overgrown with grasses, herbs, and shrubs. These areas produce grain and seed crops, grasses and legumes, and wild herbaceous plants. The wildlife attracted to these areas include Hungarian partridge, ring-necked pheasant, bobwhite quail, sharp-tailed grouse, meadowlark, field sparrow, killdeer, cottontail rabbit, and red fox.

*Habitat for woodland wildlife* consists of areas of hardwoods or conifers or a mixture of these and associated grasses, legumes, and wild herbaceous plants. The wildlife attracted to this habitat include wild turkey, ruffed grouse, thrushes, woodpeckers, owls, tree squirrels, porcupine, raccoon, white-tailed deer, black bear, and moose.

*Habitat for wetland wildlife* consists of open, marshy or swampy shallow water areas, bogs, or flood plains that support water-tolerant plants. The wildlife attracted to this habitat include ducks, geese, herons, bitterns, rails, kingfishers, muskrat, otter, mink, and beaver.

## Engineering

This section provides information for planning land uses related to urban development and to water management. Soils are rated for various uses, and the most limiting features are identified. Ratings are given for building site development, construction materials, and water management. The ratings are based on observed performance of the soils and on the data in the tables described under the heading "Soil Properties."

*Information in this section is intended for land use planning, for evaluating land use alternatives, and for planning site investigations prior to design and construction. The information, however, has limitations. For example, estimates and other data generally apply only to that part of the soil between the surface and a depth of 5 to 7 feet. Because of the map scale, small areas of different soils may be included within the mapped areas of a specific soil.*

The information is not site specific and does not eliminate the need for onsite investigation of the soils or for testing and analysis by personnel experienced in the design and construction of engineering works.

Government ordinances and regulations that restrict certain land uses or impose

specific design criteria were not considered in preparing the information in this section. Local ordinances and regulations should be considered in planning, in site selection, and in design.

Soil properties, site features, and observed performance were considered in determining the ratings in this section. During the fieldwork for this soil survey, determinations were made about particle-size distribution, liquid limit, plasticity index, soil reaction, depth to bedrock, hardness of bedrock within 5 to 7 feet of the surface, soil wetness, depth to a zone in which the soil moisture status is wet, ponding, slope, likelihood of flooding, natural soil structure aggregation, and soil density. Data were collected about kinds of clay minerals, mineralogy of the sand and silt fractions, and the kinds of adsorbed cations. Estimates were made for erodibility, permeability, corrosivity, linear extensibility, available water capacity, and other behavioral characteristics affecting engineering uses.

This information can be used to evaluate the potential of areas for residential, commercial, industrial, and recreational uses; make preliminary estimates of construction conditions; evaluate alternative routes for roads, streets, highways, pipelines, and underground cables; plan detailed onsite investigations of soils and geology; locate potential sources of gravel, sand, earthfill, and topsoil; plan drainage systems, irrigation systems, ponds, terraces, and other structures for soil and water conservation; and predict performance of proposed small structures and pavements by comparing the performance of existing similar structures on the same or similar soils.

The information in the tables, along with the soil maps, the soil descriptions, and other data provided in this survey, can be used to make additional interpretations.

Some of the terms used in this soil survey have a special meaning in soil science and are defined in the Glossary.

## **Building Site Development**

Soil properties influence the development of building sites, including the selection of the site, the design of the structure, construction, performance after construction, and maintenance. Tables 19a and 19b show the degree and kind of soil limitations that affect dwellings with and without basements, small commercial buildings, local roads and streets, shallow excavations, and lawns and landscaping.

The ratings in the tables are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect building site development.

*Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected.

*Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected.

*Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

*Dwellings* are single-family houses of three stories or less. For dwellings without basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost

penetration, whichever is deeper. For dwellings with basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of about 7 feet. The ratings for dwellings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a zone in which the soil moisture status is wet, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility. Compressibility is inferred from the Unified classification. The properties that affect the ease and amount of excavation include depth to a zone in which the soil moisture status is wet, ponding, flooding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

*Small commercial buildings* are structures that are less than three stories high and do not have basements. The foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper. The ratings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a zone in which the soil moisture status is wet, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility (which is inferred from the Unified classification). The properties that affect the ease and amount of excavation include flooding, depth to a zone in which the soil moisture status is wet, ponding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

*Local roads and streets* have an all-weather surface and carry automobile and light truck traffic all year. They have a subgrade of cut or fill soil material; a base of gravel, crushed rock, or soil material stabilized by lime or cement; and a surface of flexible material (asphalt), rigid material (concrete), or gravel with a binder. The ratings are based on the soil properties that affect the ease of excavation and grading and the traffic-supporting capacity. The properties that affect the ease of excavation and grading are depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, depth to a zone in which the soil moisture status is wet, ponding, flooding, the amount of large stones, and slope. The properties that affect the traffic-supporting capacity are soil strength (as inferred from the AASHTO group index number), subsidence, linear extensibility (shrink-swell potential), the potential for frost action, depth to a zone in which the soil moisture status is wet, and ponding.

*Shallow excavations* are trenches or holes dug to a maximum depth of 5 or 6 feet for graves, utility lines, open ditches, or other purposes. The ratings are based on the soil properties that influence the ease of digging and the resistance to sloughing. Depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, the amount of large stones, and dense layers influence the ease of digging, filling, and compacting. Depth to a zone in which the soil moisture status is wet, flooding, and ponding may restrict the period when excavations can be made. Slope influences the ease of using machinery. Soil texture, depth to a zone in which the soil moisture status is wet, and linear extensibility (shrink-swell potential) influence the resistance to sloughing.

*Lawns and landscaping* require soils on which turf and ornamental trees and shrubs can be established and maintained. Irrigation is not considered in the ratings. The ratings are based on the soil properties that affect plant growth and trafficability after vegetation is established. The properties that affect plant growth are reaction; depth to a zone in which the soil moisture status is wet; ponding; depth to bedrock or a cemented pan; the available water capacity in the upper 40 inches; the content of salts, sodium, or calcium carbonate; and sulfidic materials. The properties that affect

trafficability are flooding, depth to a zone in which the soil moisture status is wet, ponding, slope, stoniness, and the amount of sand, clay, or organic matter in the surface layer.

## Construction Materials

Tables 20a and 20b give information about the soils as potential sources of gravel, sand, reclamation material, roadfill, and topsoil. Normal compaction, minor processing, and other standard construction practices are assumed.

*Sand* and *gravel* are natural aggregates suitable for commercial use with a minimum of processing. They are used in many kinds of construction. Specifications for each use vary widely. In table 20a, only the likelihood of finding material in suitable quantity is evaluated. The suitability of the material for specific purposes is not evaluated, nor are factors that affect excavation of the material. The properties used to evaluate the soil as a source of sand or gravel are gradation of grain sizes (as indicated by the Unified classification of the soil), the thickness of suitable material, and the content of rock fragments. If the bottom layer of the soil contains sand or gravel, the soil is considered a likely source regardless of thickness. The assumption is that the sand or gravel layer below the depth of observation exceeds the minimum thickness.

The soils are rated *good*, *fair*, or *poor* as potential sources of sand and gravel. A rating of good or fair means that the source material is likely to be in or below the soil. The bottom layer and the thickest layer of the soils are assigned numerical ratings. These ratings indicate the likelihood that the layer is a source of sand or gravel. The number 0.00 indicates that the layer is a poor source. The number 1.00 indicates that the layer is a good source. A number between 0.00 and 1.00 indicates the degree to which the layer is a likely source.

In table 20b, the soils are rated *good*, *fair*, or *poor* as potential sources of reclamation material, roadfill, and topsoil. The features that limit the soils as sources of these materials are specified in the table. The numerical ratings given after the specified features indicate the degree to which the features limit the soils as sources of reclamation material, roadfill, or topsoil. The lower the number, the greater the limitation.

*Reclamation material* is used in areas that have been drastically disturbed by surface mining or similar activities. When these areas are reclaimed, layers of soil material or unconsolidated geological material, or both, are replaced in a vertical sequence. The reconstructed soil favors plant growth. The ratings in the table do not apply to quarries and other mined areas that require an offsite source of reconstruction material. The ratings are based on the soil properties that affect erosion and stability of the surface and the productive potential of the reconstructed soil. These properties include the content of sodium, salts, and calcium carbonate; reaction; available water capacity; erodibility; texture; content of rock fragments; and content of organic matter and other features that affect fertility.

*Roadfill* is soil material that is excavated in one place and used in road embankments in another place. In this table, the soils are rated as a source of roadfill for low embankments, generally less than 6 feet high and less exacting in design than higher embankments.

The ratings are for the whole soil, from the surface to a depth of about 5 feet. It is assumed that soil layers will be mixed when the soil material is excavated and spread.

The ratings are based on the amount of suitable material and on soil properties that affect the ease of excavation and the performance of the material after it is in place. The thickness of the suitable material is a major consideration. The ease of excavation is affected by large stones, depth to a zone in which the soil moisture status is wet, and slope. How well the soil performs in place after it has been compacted and

drained is determined by its strength (as inferred from the AASHTO classification of the soil) and linear extensibility (shrink-swell potential).

*Topsoil* is used to cover an area so that vegetation can be established and maintained. The upper 40 inches of a soil is evaluated for use as topsoil. Also evaluated is the reclamation potential of the borrow area. The ratings are based on the soil properties that affect plant growth; the ease of excavating, loading, and spreading the material; and reclamation of the borrow area. Toxic substances, soil reaction, and the properties that are inferred from soil texture, such as available water capacity and fertility, affect plant growth. The ease of excavating, loading, and spreading is affected by rock fragments, slope, depth to a zone in which the soil moisture status is wet, soil texture, and thickness of suitable material. Reclamation of the borrow area is affected by slope, depth to a zone in which the soil moisture status is wet, rock fragments, depth to bedrock or a cemented pan, and toxic material.

The surface layer of most soils is generally preferred for topsoil because of its organic matter content. Organic matter greatly increases the absorption and retention of moisture and nutrients for plant growth.

## Water Management

Table 21 gives information on the soil properties and site features that affect water management. The degree and kind of soil limitations are given for pond reservoir areas; embankments, dikes, and levees; and aquifer-fed excavated ponds. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect these uses.

*Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected.

*Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected.

*Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the table indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

*Pond reservoir areas* hold water behind a dam or embankment. Soils best suited to this use have low seepage potential in the upper 60 inches. The seepage potential is determined by the permeability of the soil and the depth to fractured bedrock or other permeable material. Excessive slope can affect the storage capacity of the reservoir area.

*Embankments, dikes, and levees* are raised structures of soil material, generally less than 20 feet high, constructed to impound water or to protect land against overflow. Embankments that have zoned construction (core and shell) are not considered. In this table, the soils are rated as a source of material for embankment fill. The ratings apply to the soil material below the surface layer to a depth of about 5 feet. It is assumed that soil layers will be uniformly mixed and compacted during construction.

The ratings do not indicate the ability of the natural soil to support an embankment. Soil properties to a depth even greater than the height of the embankment can affect

performance and safety of the embankment. Generally, deeper onsite investigation is needed to determine these properties.

Soil material in embankments must be resistant to seepage, piping, and erosion and have favorable compaction characteristics. Unfavorable features include less than 5 feet of suitable material and a high content of stones or boulders, organic matter, or salts or sodium. A seasonal zone in which the soil moisture status is wet affects the amount of usable material. It also affects trafficability.

*Aquifer-fed excavated ponds* are pits or dugouts that extend to a ground-water aquifer or to a depth below a permanent zone in which the soil moisture status is wet. Excluded are ponds that are fed only by surface runoff and embankment ponds that impound water 3 feet or more above the original surface. Excavated ponds are affected by depth to a permanent zone in which the soil moisture status is wet, permeability of the aquifer, and quality of the water as inferred from the salinity of the soil. Depth to bedrock and the content of large stones affect the ease of excavation.

Table 6.--Cropland Management Considerations

(See text for a description of the considerations listed in this table)

Map symbol and soil name	Pct. of map unit	Cropland management considerations
B109A: Bowstring-----	45	Flooding High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Fluvaquents-----	40	Flooding Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Hapludalfs-----	5	Slope Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Water erosion Wet soil moisture status Wind erosion
Seelyeville-----	5	Flooding High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Water-----	5	Not applicable
B200A: Garnes-----	70	Excessive permeability Potential for ground-water contamination Wet soil moisture status Wind erosion
Chilgren-----	13	Excessive permeability Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Eckvoll-----	5	Excessive permeability Potential for ground-water contamination Wet soil moisture status Wind erosion
Garnes, very stony-----	5	Excessive permeability Potential for ground-water contamination Potential for surface-water contamination Surface stones Water erosion Wet soil moisture status

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Cropland management considerations
B200A: Grygla-----	4	Excessive permeability Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Pelan-----	3	Excessive permeability Potential for ground-water contamination Wet soil moisture status Wind erosion
B201A: Chilgren-----	75	Excessive permeability Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Garnes-----	9	Excessive permeability Potential for ground-water contamination Wet soil moisture status Wind erosion
Grygla-----	5	Excessive permeability Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Grygla, depression-----	5	Excessive permeability Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Hamre-----	5	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Pelan-----	1	Excessive permeability Potential for ground-water contamination Wet soil moisture status Wind erosion
B202A: Cathro-----	80	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Cropland management considerations
B202A: Hamre-----	8	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Chilgren-----	3	Excessive permeability Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Northwood-----	3	Excessive permeability High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Berner-----	2	Excessive permeability High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Grygla-----	2	Excessive permeability Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Seelyeville-----	2	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
B203A: Northwood-----	75	Excessive permeability High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Hamre-----	10	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Cropland management considerations
B203A: Grygla-----	7	Excessive permeability Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Berner-----	5	Excessive permeability High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Chilgren-----	3	Excessive permeability Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
B204A: Roliss-----	75	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Grygla-----	8	Excessive permeability Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Chilgren-----	5	Excessive permeability Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Garnes-----	5	Excessive permeability Potential for ground-water contamination Wet soil moisture status Wind erosion
Roliss, depressional-----	5	Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Hamre-----	2	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Cropland management considerations
B205A: Bernre-----	80	Excessive permeability High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Northwood-----	7	Excessive permeability High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Grygla-----	5	Excessive permeability Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Cathro-----	3	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Hamre-----	3	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Seelyeville-----	2	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
B206A: Hamre-----	80	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Chilgren-----	8	Excessive permeability Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Cropland management considerations
E206A: Northwood-----	5	Excessive permeability High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Cathro-----	3	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Grygla-----	2	Excessive permeability Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Roliss-----	2	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I1A: Augsburg-----	75	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Borup-----	10	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Foxlake-----	5	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Augsburg, depression-----	3	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Wheatville-----	3	Lime content Potential for ground-water contamination Wet soil moisture status Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Cropland management considerations
I1A:		
Glyndon-----	2	Lime content Potential for ground-water contamination Wet soil moisture status Wind erosion
Espelie-----	1	Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Hattie-----	1	Lime content Potential poor tilth and compaction Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
I2A:		
Augsburg-----	75	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Borup-----	10	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Foxlake-----	5	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Augsburg, depression-----	3	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Wheatville-----	3	Lime content Potential for ground-water contamination Wet soil moisture status Wind erosion
Glyndon-----	2	Lime content Potential for ground-water contamination Wet soil moisture status Wind erosion
Espelie-----	1	Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Cropland management considerations
I2A: Hattie-----	1	Lime content Potential poor tilth and compaction Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
I3A: Bernier-----	80	Excessive permeability High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Northwood-----	7	Excessive permeability High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Kratka-----	5	Excessive permeability Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Hamre-----	3	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Strathcona-----	3	Excessive permeability Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Seelyeville-----	2	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I4A: Bernier-----	30	Excessive permeability High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Cropland management considerations
I4A: Rosewood, depressional-----	30	Excessive permeability Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Strathcona, depressional-----	30	Excessive permeability Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Rosewood-----	4	Excessive permeability Lime content Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Deerwood-----	2	Excessive permeability High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Mavie-----	2	Excessive permeability Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Strathcona-----	2	Excessive permeability Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I5A: Borup-----	75	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Glyndon-----	9	Lime content Potential for ground-water contamination Wet soil moisture status Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Cropland management considerations
I5A:		
Rosewood-----	8	Excessive permeability Lime content Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Augsburg-----	5	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Augsburg, depressional-----	3	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I6A:		
Borup-----	75	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Glyndon-----	9	Lime content Potential for ground-water contamination Wet soil moisture status Wind erosion
Rosewood-----	8	Excessive permeability Lime content Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Augsburg-----	5	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Augsburg, depressional-----	3	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Cropland management considerations
I7A: Bowstring-----	45	Flooding High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Fluvaquents-----	45	Flooding Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Hapludolls-----	5	Slope Potential for surface-water contamination Water erosion
Water-----	5	Not applicable
I8A: Cathro-----	80	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Hamre-----	8	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Northwood-----	3	Excessive permeability High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Roliss-----	3	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Berner-----	2	Excessive permeability High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Kratka-----	2	Excessive permeability Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Cropland management considerations
I8A: Seelyeville-----	2	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I9A: Clearwater-----	80	Ponding Potential poor tilth and compaction Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Clearwater, very cobbly-----	5	Ponding Potential poor tilth and compaction Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Reis-----	5	Lime content Potential poor tilth and compaction Potential for ground-water contamination Wet soil moisture status
Clearwater, depressional-----	3	Ponding Potential poor tilth and compaction Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Espelie-----	3	Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Foxlake-----	2	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Hattie-----	1	Lime content Potential poor tilth and compaction Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Huot-----	1	Excessive permeability Lime content Potential for ground-water contamination Wet soil moisture status Wind erosion
I10A: Clearwater, depressional-----	85	Ponding Potential poor tilth and compaction Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Cropland management considerations
I10A: Clearwater-----	9	Ponding Potential poor tilth and compaction Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Augsburg, depressional-----	3	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Reis-----	2	Lime content Potential poor tilth and compaction Potential for ground-water contamination Wet soil moisture status
Espelie-----	1	Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I11A: Deerwood-----	85	Excessive permeability High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Rosewood-----	6	Excessive permeability Lime content Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Markey-----	3	Excessive permeability High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Strathcona-----	2	Excessive permeability Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Cropland management considerations
I11A: Syrene-----	2	Excessive permeability Lime content Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Venlo-----	2	Excessive permeability Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I12A: Eckvoll-----	70	Excessive permeability Potential for ground-water contamination Wet soil moisture status Wind erosion
Kratka-----	8	Excessive permeability Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Smiley-----	7	Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Linveltdt-----	5	Excessive permeability Potential for ground-water contamination Wet soil moisture status Wind erosion
Reiner-----	5	Potential for ground-water contamination Wet soil moisture status Wind erosion
Foldahl-----	2	Excessive permeability Potential for ground-water contamination Wet soil moisture status Wind erosion
Pelan-----	2	Excessive permeability Potential for ground-water contamination Wet soil moisture status Wind erosion
Poppleton-----	1	Excessive permeability Limited available water capacity Limited content of organic matter Potential for ground-water contamination Wet soil moisture status Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Cropland management considerations
I13A: Espelie-----	75	Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Foxlake-----	8	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Hilaire-----	7	Excessive permeability Potential for ground-water contamination Wet soil moisture status Wind erosion
Clearwater, depressional----	5	Ponding Potential poor tilth and compaction Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Thiefriever-----	5	Excessive permeability Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I14B: Fairdale-----	85	Flooding Lime content Potential for ground-water contamination Potential for surface-water contamination Water erosion Wet soil moisture status Wind erosion
Fluvaquents-----	6	Flooding Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Hapludolls-----	5	Slope Potential for surface-water contamination Water erosion
Hapludalfs-----	2	Slope Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Water erosion Wet soil moisture status Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Cropland management considerations
I14B: Zell-----	2	Slope Lime content Potential for ground-water contamination Potential for surface-water contamination Water erosion Wind erosion
I14D: Fairdale-----	85	Flooding Lime content Potential for ground-water contamination Potential for surface-water contamination Water erosion Wet soil moisture status Wind erosion
Fluvaquents-----	6	Flooding Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Hapludolls-----	4	Slope Potential for surface-water contamination Water erosion
Zell-----	3	Slope Lime content Potential for ground-water contamination Potential for surface-water contamination Water erosion Wind erosion
Hapludalfs-----	2	Slope Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Water erosion Wet soil moisture status Wind erosion
I15A: Flaming-----	70	Excessive permeability Limited available water capacity Potential for ground-water contamination Wet soil moisture status Wind erosion
Garborg-----	10	Excessive permeability Limited available water capacity Potential for ground-water contamination Wet soil moisture status Wind erosion
Hamar-----	5	Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Cropland management considerations
I15A: Ulen-----	5	Excessive permeability Lime content Limited available water capacity Potential for ground-water contamination Wet soil moisture status Wind erosion
Poppleton-----	3	Excessive permeability Limited available water capacity Limited content of organic matter Potential for ground-water contamination Wet soil moisture status Wind erosion
Sandberg-----	3	Excessive permeability Limited available water capacity Potential for ground-water contamination Wind erosion
Foldahl-----	2	Excessive permeability Potential for ground-water contamination Wet soil moisture status Wind erosion
Radium-----	2	Excessive permeability Limited available water capacity Potential for ground-water contamination Wind erosion
I16F: Fluvaquents-----	55	Flooding Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Hapludolls-----	25	Slope Potential for surface-water contamination Water erosion
Hapludalfs-----	7	Slope Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Water erosion Wet soil moisture status Wind erosion
Fairdale-----	5	Flooding Lime content Potential for ground-water contamination Potential for surface-water contamination Water erosion Wet soil moisture status Wind erosion
Water-----	5	Not applicable

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Cropland management considerations
I16F: Bowstring-----	2	Flooding High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Rauville-----	1	Flooding Lime content Ponding Potential poor tilth and compaction Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I17A: Foldahl-----	75	Excessive permeability Potential for ground-water contamination Wet soil moisture status Wind erosion
Kratka-----	10	Excessive permeability Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Roliss-----	5	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Flaming-----	4	Excessive permeability Limited available water capacity Potential for ground-water contamination Wet soil moisture status Wind erosion
Grimstad-----	2	Excessive permeability Lime content Potential for ground-water contamination Wet soil moisture status Wind erosion
Linveldt-----	2	Excessive permeability Potential for ground-water contamination Wet soil moisture status Wind erosion
Eckvoll-----	1	Excessive permeability Potential for ground-water contamination Wet soil moisture status Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Cropland management considerations
I17A: Strathcona-----	1	Excessive permeability Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I18A: Foldahl-----	75	Excessive permeability Potential for ground-water contamination Wet soil moisture status Wind erosion
Kratka-----	10	Excessive permeability Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Roliss-----	5	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Flaming-----	4	Excessive permeability Limited available water capacity Potential for ground-water contamination Wet soil moisture status Wind erosion
Grimstad-----	2	Excessive permeability Lime content Potential for ground-water contamination Wet soil moisture status Wind erosion
Linveldt-----	2	Excessive permeability Potential for ground-water contamination Wet soil moisture status Wind erosion
Eckvoll-----	1	Excessive permeability Potential for ground-water contamination Wet soil moisture status Wind erosion
Strathcona-----	1	Excessive permeability Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I19A: Foxhome-----	65	Excessive permeability Potential for ground-water contamination Wet soil moisture status Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Cropland management considerations
I19A: Kittson-----	10	Potential for ground-water contamination Wet soil moisture status
Strandquist-----	10	Excessive permeability Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Foldahl-----	5	Excessive permeability Potential for ground-water contamination Wet soil moisture status Wind erosion
Grimstad-----	5	Excessive permeability Lime content Potential for ground-water contamination Wet soil moisture status Wind erosion
Roliss-----	3	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Mavie-----	2	Excessive permeability Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I20A: Foxlake-----	75	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Clearwater-----	5	Ponding Potential poor tilth and compaction Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Foxlake, very cobbly-----	5	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Cropland management considerations
I20A: Augsburg-----	3	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Clearwater, depressiona-----	3	Ponding Potential poor tilth and compaction Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Espelie-----	3	Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Hilaire-----	2	Excessive permeability Potential for ground-water contamination Wet soil moisture status Wind erosion
Reis-----	2	Lime content Potential poor tilth and compaction Potential for ground-water contamination Wet soil moisture status
Wheatville-----	2	Lime content Potential for ground-water contamination Wet soil moisture status Wind erosion
I21A: Fram-----	85	Lime content Potential for ground-water contamination Wet soil moisture status Wind erosion
Hedman-----	12	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Strathcona-----	2	Excessive permeability Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Foxhome-----	1	Excessive permeability Potential for ground-water contamination Wet soil moisture status Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Cropland management considerations
I22A:		
Glyndon-----	75	Lime content Potential for ground-water contamination Wet soil moisture status Wind erosion
Borup-----	10	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Augsburg-----	5	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Ulen-----	5	Excessive permeability Lime content Limited available water capacity Potential for ground-water contamination Wet soil moisture status Wind erosion
Wheatville-----	3	Lime content Potential for ground-water contamination Wet soil moisture status Wind erosion
Flaming-----	2	Excessive permeability Limited available water capacity Potential for ground-water contamination Wet soil moisture status Wind erosion
I23A:		
Glyndon-----	75	Lime content Potential for ground-water contamination Wet soil moisture status Wind erosion
Borup-----	10	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Augsburg-----	5	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Ulen-----	5	Excessive permeability Lime content Limited available water capacity Potential for ground-water contamination Wet soil moisture status Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Cropland management considerations
I23A: Wheatville-----	3	Lime content Potential for ground-water contamination Wet soil moisture status Wind erosion
Flaming-----	2	Excessive permeability Limited available water capacity Potential for ground-water contamination Wet soil moisture status Wind erosion
I24A: Grimstad-----	70	Excessive permeability Lime content Potential for ground-water contamination Wet soil moisture status Wind erosion
Strathcona-----	12	Excessive permeability Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Foldahl-----	5	Excessive permeability Potential for ground-water contamination Wet soil moisture status Wind erosion
Hamerly-----	5	Lime content Potential for ground-water contamination Wet soil moisture status Wind erosion
Foxhome-----	2	Excessive permeability Potential for ground-water contamination Wet soil moisture status Wind erosion
Karlsruhe-----	2	Excessive permeability Limited available water capacity Potential for ground-water contamination Wet soil moisture status Wind erosion
Mavie-----	2	Excessive permeability Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Ulen-----	2	Excessive permeability Lime content Limited available water capacity Potential for ground-water contamination Wet soil moisture status Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Cropland management considerations
I25A:		
Hamar-----	75	Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Garborg-----	10	Excessive permeability Limited available water capacity Potential for ground-water contamination Wet soil moisture status Wind erosion
Rosewood-----	7	Excessive permeability Lime content Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Venlo-----	3	Excessive permeability Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Flaming-----	2	Excessive permeability Limited available water capacity Potential for ground-water contamination Wet soil moisture status Wind erosion
Hangaard-----	2	Excessive permeability Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Kratka-----	1	Excessive permeability Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I26A:		
Hamerly-----	75	Lime content Potential for ground-water contamination Wet soil moisture status Wind erosion
Vallers-----	12	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Cropland management considerations
I26A: Foxhome-----	3	Excessive permeability Potential for ground-water contamination Wet soil moisture status Wind erosion
Grimstad-----	3	Excessive permeability Lime content Potential for ground-water contamination Wet soil moisture status Wind erosion
Hamerly, very cobbly-----	3	Lime content Potential for ground-water contamination Wet soil moisture status Wind erosion
Strathcona-----	3	Excessive permeability Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Roliss, depression-----	1	Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
I27A: Hamre-----	80	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Northwood-----	5	Excessive permeability High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Roliss-----	5	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Smiley-----	5	Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Cathro-----	3	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Cropland management considerations
I27A: Kratka-----	2	Excessive permeability Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I28A: Hangaard-----	75	Excessive permeability Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Hamar-----	7	Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Syrene-----	7	Excessive permeability Lime content Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Karlsruhe-----	3	Excessive permeability Limited available water capacity Potential for ground-water contamination Wet soil moisture status Wind erosion
Rosewood-----	3	Excessive permeability Lime content Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Strandquist-----	3	Excessive permeability Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Deerwood-----	2	Excessive permeability High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Cropland management considerations
I29A: Hattie-----	75	Lime content Potential poor tilth and compaction Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Clearwater-----	12	Ponding Potential poor tilth and compaction Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Reis-----	6	Lime content Potential poor tilth and compaction Potential for ground-water contamination Wet soil moisture status
Hattie, very cobbly-----	5	Lime content Potential poor tilth and compaction Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Hilaire-----	2	Excessive permeability Potential for ground-water contamination Wet soil moisture status Wind erosion
I29D: Hattie-----	85	Slope Lime content Potential poor tilth and compaction Potential for ground-water contamination Potential for surface-water contamination Water erosion Wet soil moisture status
Clearwater-----	6	Ponding Potential poor tilth and compaction Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Hattie, level-----	5	Lime content Potential poor tilth and compaction Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Boyerlake-----	4	Lime content Potential poor tilth and compaction Potential for ground-water contamination Potential for surface-water contamination Water erosion Wet soil moisture status
I30A: Hedman-----	85	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Cropland management considerations
I30A:		
Fram-----	5	Lime content Potential for ground-water contamination Wet soil moisture status Wind erosion
Strathcona-----	5	Excessive permeability Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Haug-----	3	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Strandquist-----	2	Excessive permeability Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I31A:		
Hedman-----	50	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Fram-----	40	Lime content Potential for ground-water contamination Wet soil moisture status Wind erosion
Strathcona-----	5	Excessive permeability Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Haug-----	3	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Strandquist-----	2	Excessive permeability Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Cropland management considerations
I32A: Hilaire-----	75	Excessive permeability Potential for ground-water contamination Wet soil moisture status Wind erosion
Espelie-----	12	Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Huot-----	5	Excessive permeability Lime content Potential for ground-water contamination Wet soil moisture status Wind erosion
Flaming-----	2	Excessive permeability Limited available water capacity Potential for ground-water contamination Wet soil moisture status Wind erosion
Foxlake-----	2	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Wheatville-----	2	Lime content Potential for ground-water contamination Wet soil moisture status Wind erosion
Thiefriever-----	1	Excessive permeability Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Wyandotte-----	1	Excessive permeability Lime content Ponding Potential poor tilth and compaction Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I33A: Hilaire-----	75	Excessive permeability Potential for ground-water contamination Wet soil moisture status Wind erosion
Espelie-----	12	Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Cropland management considerations
I33A:		
Huot-----	5	Excessive permeability Lime content Potential for ground-water contamination Wet soil moisture status Wind erosion
Flaming-----	2	Excessive permeability Limited available water capacity Potential for ground-water contamination Wet soil moisture status Wind erosion
Foxlake-----	2	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Wheatville-----	2	Lime content Potential for ground-water contamination Wet soil moisture status Wind erosion
Thiefriever-----	1	Excessive permeability Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Wyandotte-----	1	Excessive permeability Lime content Ponding Potential poor tilth and compaction Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I34A:		
Huot-----	75	Excessive permeability Lime content Potential for ground-water contamination Wet soil moisture status Wind erosion
Thiefriever-----	12	Excessive permeability Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Hilaire-----	5	Excessive permeability Potential for ground-water contamination Wet soil moisture status Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Cropland management considerations
I34A: Flaming-----	3	Excessive permeability Limited available water capacity Potential for ground-water contamination Wet soil moisture status Wind erosion
Foxlake-----	3	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Ulen-----	2	Excessive permeability Lime content Limited available water capacity Potential for ground-water contamination Wet soil moisture status Wind erosion
I35A: Karlsruhe-----	70	Excessive permeability Limited available water capacity Potential for ground-water contamination Wet soil moisture status Wind erosion
Syrene-----	10	Excessive permeability Lime content Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Ulen-----	10	Excessive permeability Lime content Limited available water capacity Potential for ground-water contamination Wet soil moisture status Wind erosion
Radium-----	5	Excessive permeability Limited available water capacity Potential for ground-water contamination Wind erosion
Rosewood-----	3	Excessive permeability Lime content Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Sandberg-----	2	Excessive permeability Limited available water capacity Potential for ground-water contamination Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Cropland management considerations
I36A: Kittson-----	70	Potential for ground-water contamination Wet soil moisture status
Roliss-----	12	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Hamerly-----	5	Lime content Potential for ground-water contamination Wet soil moisture status Wind erosion
Kratka-----	5	Excessive permeability Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Grimstad-----	3	Excessive permeability Lime content Potential for ground-water contamination Wet soil moisture status Wind erosion
Strandquist-----	3	Excessive permeability Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Foxhome-----	2	Excessive permeability Potential for ground-water contamination Wet soil moisture status Wind erosion
I37A: Kratka, depressional-----	45	Excessive permeability Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Strathcona, depressional-----	45	Excessive permeability Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Cropland management considerations
I37A: Northwood-----	5	Excessive permeability High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Kratka-----	2	Excessive permeability Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Strathcona-----	2	Excessive permeability Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Roliss-----	1	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I38A: Kratka-----	70	Excessive permeability Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Smiley-----	7	Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Foldahl-----	5	Excessive permeability Potential for ground-water contamination Wet soil moisture status Wind erosion
Kratka, very cobbly-----	5	Excessive permeability Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Strathcona-----	5	Excessive permeability Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Cropland management considerations
I38A: Kratka, depressional-----	3	Excessive permeability Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Strandquist-----	3	Excessive permeability Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Linveldt-----	2	Excessive permeability Potential for ground-water contamination Wet soil moisture status Wind erosion
I39A: Linveldt-----	65	Excessive permeability Potential for ground-water contamination Wet soil moisture status Wind erosion
Kratka-----	14	Excessive permeability Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Reiner-----	10	Potential for ground-water contamination Wet soil moisture status Wind erosion
Smiley-----	5	Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Eckvoll-----	3	Excessive permeability Potential for ground-water contamination Wet soil moisture status Wind erosion
Foldahl-----	2	Excessive permeability Potential for ground-water contamination Wet soil moisture status Wind erosion
Pelan-----	1	Excessive permeability Potential for ground-water contamination Wet soil moisture status Wind erosion
I40B: Maddock-----	85	Limited available water capacity Potential for ground-water contamination Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Cropland management considerations
I40B: Flaming-----	5	Excessive permeability Limited available water capacity Potential for ground-water contamination Wet soil moisture status Wind erosion
Sandberg-----	5	Excessive permeability Limited available water capacity Potential for ground-water contamination Wind erosion
Halverson-----	3	Excessive permeability Potential for ground-water contamination Potential for surface-water contamination Wind erosion
Hamar-----	2	Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I40F: Maddock-----	90	Slope Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Water erosion Wind erosion
Flaming-----	5	Excessive permeability Limited available water capacity Potential for ground-water contamination Wet soil moisture status Wind erosion
Sandberg-----	5	Excessive permeability Limited available water capacity Potential for ground-water contamination Wind erosion
I41A: Markey-----	80	Excessive permeability High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Deerwood-----	12	Excessive permeability High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Cropland management considerations
I41A:		
Berners-----	2	Excessive permeability High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Hamar-----	2	Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Seelyeville-----	2	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Syrene-----	2	Excessive permeability Lime content Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I42A:		
Markey, ponded-----	85	Excessive permeability High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Markey-----	5	Excessive permeability High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Deerwood-----	4	Excessive permeability High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Seelyeville, ponded-----	4	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Cropland management considerations
I42A: Hamar-----	1	Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Hangaard-----	1	Excessive permeability Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I43A: Mavie-----	70	Excessive permeability Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Vallers-----	10	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Strandquist-----	7	Excessive permeability Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Strathcona-----	5	Excessive permeability Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Strathcona, depression-----	3	Excessive permeability Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Foxhome-----	2	Excessive permeability Potential for ground-water contamination Wet soil moisture status Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Cropland management considerations
I43A: Karlsruhe-----	2	Excessive permeability Limited available water capacity Potential for ground-water contamination Wet soil moisture status Wind erosion
Grimstad-----	1	Excessive permeability Lime content Potential for ground-water contamination Wet soil moisture status Wind erosion
I44A: Newfolden-----	75	Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Smiley-----	12	Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Boash-----	8	Ponding Potential poor tilth and compaction Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Linveltdt-----	4	Excessive permeability Potential for ground-water contamination Wet soil moisture status Wind erosion
Hapludolls-----	1	Slope Potential for surface-water contamination Water erosion
I45A: Northwood-----	75	Excessive permeability High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Hamre-----	10	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Berner-----	5	Excessive permeability High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Cropland management considerations
I45A: Kratka-----	5	Excessive permeability Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Strandquist-----	3	Excessive permeability Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Roliss-----	2	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I46A: Pits-----	85	Not applicable
Udipsammets-----	10	Slope Excessive permeability Limited available water capacity Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Wind erosion
Radium-----	2	Excessive permeability Limited available water capacity Potential for ground-water contamination Wind erosion
Maddock-----	1	Limited available water capacity Potential for ground-water contamination Wind erosion
Marquette-----	1	Excessive permeability Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wind erosion
Sandberg-----	1	Excessive permeability Limited available water capacity Potential for ground-water contamination Wind erosion
I47A: Poppleton-----	75	Excessive permeability Limited available water capacity Limited content of organic matter Potential for ground-water contamination Wet soil moisture status Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Cropland management considerations
I47A: Flaming-----	12	Excessive permeability Limited available water capacity Potential for ground-water contamination Wet soil moisture status Wind erosion
Garborg-----	5	Excessive permeability Limited available water capacity Potential for ground-water contamination Wet soil moisture status Wind erosion
Hamar-----	3	Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Radium-----	2	Excessive permeability Limited available water capacity Potential for ground-water contamination Wind erosion
Ulen-----	2	Excessive permeability Lime content Limited available water capacity Potential for ground-water contamination Wet soil moisture status Wind erosion
Maddock-----	1	Limited available water capacity Potential for ground-water contamination Wind erosion
I48A: Radium-----	75	Excessive permeability Limited available water capacity Potential for ground-water contamination Wind erosion
Sandberg-----	7	Excessive permeability Limited available water capacity Potential for ground-water contamination Wind erosion
Oylen-----	5	Excessive permeability Limited available water capacity Potential for ground-water contamination Wind erosion
Flaming-----	4	Excessive permeability Limited available water capacity Potential for ground-water contamination Wet soil moisture status Wind erosion
Garborg-----	3	Excessive permeability Limited available water capacity Potential for ground-water contamination Wet soil moisture status Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Cropland management considerations
I48A: Hangaard-----	3	Excessive permeability Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Hamar-----	2	Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Poppleton-----	1	Excessive permeability Limited available water capacity Limited content of organic matter Potential for ground-water contamination Wet soil moisture status Wind erosion
I49A: Rauville-----	80	Flooding Lime content Ponding Potential poor tilth and compaction Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Fluvaquents-----	12	Flooding Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Water-----	5	Not applicable
Lamoure-----	3	Flooding Lime content Ponding Potential poor tilth and compaction Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I50A: Reiner-----	70	Potential for ground-water contamination Wet soil moisture status Wind erosion
Smiley-----	12	Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Reiner, very cobbly-----	7	Potential for ground-water contamination Wet soil moisture status Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Cropland management considerations
I50A:		
Linveldt-----	5	Excessive permeability Potential for ground-water contamination Wet soil moisture status Wind erosion
Eckvoll-----	3	Excessive permeability Potential for ground-water contamination Wet soil moisture status Wind erosion
Kratka-----	3	Excessive permeability Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I51A:		
Reiner-----	65	Excessive permeability Potential for ground-water contamination Wet soil moisture status Wind erosion
Smiley-----	9	Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Reiner fine sandy loam-----	8	Potential for ground-water contamination Wet soil moisture status Wind erosion
Linveldt-----	7	Excessive permeability Potential for ground-water contamination Wet soil moisture status Wind erosion
Kratka-----	5	Excessive permeability Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Eckvoll-----	3	Excessive permeability Potential for ground-water contamination Wet soil moisture status Wind erosion
Reiner, very cobbly-----	3	Potential for ground-water contamination Wet soil moisture status Wind erosion
I52A:		
Reis-----	55	Lime content Potential poor tilth and compaction Potential for ground-water contamination Wet soil moisture status

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Cropland management considerations
I52A: Clearwater-----	30	Ponding Potential poor tilth and compaction Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Clearwater, very cobbly-----	5	Ponding Potential poor tilth and compaction Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Clearwater, depressional-----	3	Ponding Potential poor tilth and compaction Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Espelie-----	3	Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Hattie-----	3	Lime content Potential poor tilth and compaction Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Wyandotte-----	1	Excessive permeability Lime content Ponding Potential poor tilth and compaction Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I53A: Roliss-----	75	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Kratka-----	8	Excessive permeability Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Roliss, very cobbly-----	7	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Kittson-----	5	Potential for ground-water contamination Wet soil moisture status

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Cropland management considerations
I53A: Roliss, depressional-----	3	Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Smiley-----	2	Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
I54A: Roliss, depressional-----	80	Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Roliss-----	12	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Hamre-----	5	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Kratka-----	3	Excessive permeability Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I55A: Rosewood-----	75	Excessive permeability Lime content Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Ulen-----	10	Excessive permeability Lime content Limited available water capacity Potential for ground-water contamination Wet soil moisture status Wind erosion
Hamar-----	6	Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Cropland management considerations
I55A: Rosewood, depressional-----	3	Excessive permeability Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Syrene-----	3	Excessive permeability Lime content Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Karlsruhe-----	1	Excessive permeability Limited available water capacity Potential for ground-water contamination Wet soil moisture status Wind erosion
Strathcona-----	1	Excessive permeability Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Thiefriever-----	1	Excessive permeability Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I56A: Rosewood-----	50	Excessive permeability Lime content Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Venlo-----	40	Excessive permeability Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Cropland management considerations
I56A: Deerwood-----	3	Excessive permeability High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Syrene-----	3	Excessive permeability Lime content Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Ulen-----	2	Excessive permeability Lime content Limited available water capacity Potential for ground-water contamination Wet soil moisture status Wind erosion
Strathcona-----	1	Excessive permeability Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Thiefriever-----	1	Excessive permeability Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I57B: Sandberg-----	50	Excessive permeability Limited available water capacity Potential for ground-water contamination Wind erosion
Radium-----	25	Excessive permeability Limited available water capacity Potential for ground-water contamination Wind erosion
Sioux-----	8	Excessive permeability Limited available water capacity Potential for ground-water contamination Wind erosion
Oylen-----	7	Excessive permeability Limited available water capacity Potential for ground-water contamination Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Cropland management considerations
I57B: Flaming-----	5	Excessive permeability Limited available water capacity Potential for ground-water contamination Wet soil moisture status Wind erosion
Garborg-----	5	Excessive permeability Limited available water capacity Potential for ground-water contamination Wet soil moisture status Wind erosion
I58A: Seelyeville-----	90	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Cathro-----	3	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Dora-----	3	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Markey-----	3	Excessive permeability High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Berner-----	1	Excessive permeability High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I59A: Smiley-----	65	Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Smiley, very cobbly-----	10	Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Cropland management considerations
I59A:		
Kratka-----	9	Excessive permeability Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Roliss-----	5	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Reiner-----	4	Potential for ground-water contamination Wet soil moisture status Wind erosion
Linveltdt-----	3	Excessive permeability Potential for ground-water contamination Wet soil moisture status Wind erosion
Smiley, depressiona-----	3	Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Strandquist-----	1	Excessive permeability Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I60A:		
Smiley, depressiona-----	80	Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Smiley-----	10	Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Hamre-----	5	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Kratka-----	5	Excessive permeability Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Cropland management considerations
I61A: Strandquist-----	70	Excessive permeability Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Mavie-----	8	Excessive permeability Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Roliss-----	7	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Kratka-----	5	Excessive permeability Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Foxhome-----	4	Excessive permeability Potential for ground-water contamination Wet soil moisture status Wind erosion
Hangaard-----	3	Excessive permeability Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Northwood-----	3	Excessive permeability High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I62A: Syrene-----	70	Excessive permeability Lime content Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Cropland management considerations
I62A:		
Rosewood-----	11	Excessive permeability Lime content Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Hangaard-----	5	Excessive permeability Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Karlsruhe-----	4	Excessive permeability Limited available water capacity Potential for ground-water contamination Wet soil moisture status Wind erosion
Deerwood-----	3	Excessive permeability High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Hamar-----	3	Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Strandquist-----	2	Excessive permeability Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Radium-----	1	Excessive permeability Limited available water capacity Potential for ground-water contamination Wind erosion
Wyandotte-----	1	Excessive permeability Lime content Ponding Potential poor tilth and compaction Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Cropland management considerations
I63A: Thiefriver-----	70	Excessive permeability Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Espelle-----	10	Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Foxlake-----	7	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Huot-----	5	Excessive permeability Lime content Potential for ground-water contamination Wet soil moisture status Wind erosion
Clearwater, depressional-----	3	Ponding Potential poor tilth and compaction Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Rosewood-----	3	Excessive permeability Lime content Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Ulen-----	1	Excessive permeability Lime content Limited available water capacity Potential for ground-water contamination Wet soil moisture status Wind erosion
Wyandotte-----	1	Excessive permeability Lime content Ponding Potential poor tilth and compaction Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Cropland management considerations
I64A: Ulen-----	70	Excessive permeability Lime content Limited available water capacity Potential for ground-water contamination Wet soil moisture status Wind erosion
Rosewood-----	10	Excessive permeability Lime content Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Flaming-----	8	Excessive permeability Limited available water capacity Potential for ground-water contamination Wet soil moisture status Wind erosion
Karlsruhe-----	5	Excessive permeability Limited available water capacity Potential for ground-water contamination Wet soil moisture status Wind erosion
Radium-----	3	Excessive permeability Limited available water capacity Potential for ground-water contamination Wind erosion
Strathcona-----	2	Excessive permeability Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Thiefriever-----	2	Excessive permeability Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I65A: Ulen-----	70	Excessive permeability Lime content Limited available water capacity Potential for ground-water contamination Wet soil moisture status Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Cropland management considerations
I65A: Rosewood-----	10	Excessive permeability Lime content Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Flaming-----	6	Excessive permeability Limited available water capacity Potential for ground-water contamination Wet soil moisture status Wind erosion
Poppleton-----	4	Excessive permeability Limited available water capacity Limited content of organic matter Potential for ground-water contamination Wet soil moisture status Wind erosion
Karlsruhe-----	3	Excessive permeability Limited available water capacity Potential for ground-water contamination Wet soil moisture status Wind erosion
Radium-----	3	Excessive permeability Limited available water capacity Potential for ground-water contamination Wind erosion
Strathcona-----	2	Excessive permeability Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Thiefriver-----	2	Excessive permeability Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I66A: Vallars-----	75	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Vallars, very cobbly-----	7	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Cropland management considerations
I66A: Hamerly-----	6	Lime content Potential for ground-water contamination Wet soil moisture status Wind erosion
Grimstad-----	3	Excessive permeability Lime content Potential for ground-water contamination Wet soil moisture status Wind erosion
Mavie-----	3	Excessive permeability Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Roliss, depression-----	3	Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Strathcona-----	3	Excessive permeability Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I67A: Wheatville-----	70	Lime content Potential for ground-water contamination Wet soil moisture status Wind erosion
Augsburg-----	13	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Glyndon-----	8	Lime content Potential for ground-water contamination Wet soil moisture status Wind erosion
Foxlake-----	5	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Hilaire-----	2	Excessive permeability Potential for ground-water contamination Wet soil moisture status Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Cropland management considerations
I67A: Ulen-----	2	Excessive permeability Lime content Limited available water capacity Potential for ground-water contamination Wet soil moisture status Wind erosion
I68A: Wheatville-----	70	Lime content Potential for ground-water contamination Wet soil moisture status Wind erosion
Augsburg-----	13	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Glyndon-----	8	Lime content Potential for ground-water contamination Wet soil moisture status Wind erosion
Foxlake-----	5	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Hilaire-----	2	Excessive permeability Potential for ground-water contamination Wet soil moisture status Wind erosion
Ulen-----	2	Excessive permeability Lime content Limited available water capacity Potential for ground-water contamination Wet soil moisture status Wind erosion
I69A: Wyandotte-----	65	Excessive permeability Lime content Ponding Potential poor tilth and compaction Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Foxlake-----	10	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Cropland management considerations
I69A: Espelie-----	8	Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Clearwater, depressional----	5	Ponding Potential poor tilth and compaction Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Thiefriever-----	5	Excessive permeability Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Karlsruhe-----	4	Excessive permeability Limited available water capacity Potential for ground-water contamination Wet soil moisture status Wind erosion
Syrene-----	3	Excessive permeability Lime content Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I70A: Strathcona-----	70	Excessive permeability Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Kratka-----	10	Excessive permeability Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Roliss-----	6	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Grimstad-----	5	Excessive permeability Lime content Potential for ground-water contamination Wet soil moisture status Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Cropland management considerations
I70A: Mavie-----	3	Excessive permeability Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Rosewood-----	3	Excessive permeability Lime content Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Strathcona, depressional-----	3	Excessive permeability Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
M-W: Miscellaneous water-----	100	Not applicable
W: Water-----	100	Not applicable

Table 7.--Land Capability and Yields per Acre of Crops and Pasture

(Yields are those that can be expected under a high level of management. They are for nonirrigated areas. Absence of a yield indicates that the soil is not suited to the crop or the crop generally is not grown on the soil)

Map symbol and soil name	Pct. of map unit	Land capability	Alfalfa hay	Bromegrass-alfalfa	Reed canarygrass	Soybeans	Sunflowers	Barley	Spring wheat
			Tons	AUM*	Tons	Bu	Lbs	Bu	Bu
B109A-----			---	---	4.0	---	---	---	---
Bowstring-----	45	6w							
Fluvaquents-----	40	6w							
Hapludalfs-----	5	6e							
Seelyeville-----	5	6w							
Water-----	5	---							
B200A-----			5.5	6.5	---	---	2000	80	45
Garnes-----	70	1							
Chilgren-----	13	2w							
Eckvoll-----	5	3s							
Garnes, very stony-----	5	2e							
Grygla-----	4	4w							
Pelan-----	3	3s							
B201A-----			4.0	5.0	---	---	1300	60	35
Chilgren-----	75	2w							
Garnes-----	9	1							
Grygla-----	5	4w							
Grygla, depressional-----	5	6w							
Hamre-----	5	6w							
Pelan-----	1	3s							
B202A-----			---	---	5.5	---	---	---	---
Cathro-----	80	6w							
Hamre-----	8	6w							
Chilgren-----	3	2w							
Northwood-----	3	6w							
Berner-----	2	6w							
Grygla-----	2	4w							
Seelyeville-----	2	6w							
B203A-----			---	---	5.5	---	---	---	---
Northwood-----	75	6w							
Hamre-----	10	6w							
Grygla-----	7	4w							
Berner-----	5	6w							
Chilgren-----	3	2w							

See footnote at end of table.

Table 7.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Pct. of map unit	Land capability	Alfalfa hay	Bromegrass- alfalfa	Reed canarygrass	Soybeans	Sunflowers	Barley	Spring wheat
			Tons	AUM*	Tons	Bu	Lbs	Bu	Bu
B204A-----			4.0	5.0	---	---	1400	65	35
Roliss-----	75	2w							
Grygla-----	8	4w							
Chilgren-----	5	2w							
Garnes-----	5	1							
Roliss, depressiona-----	5	6w							
Hamre-----	2	6w							
B205A-----			---	---	4.5	---	---	---	---
Berner-----	80	6w							
Northwood-----	7	6w							
Grygla-----	5	4w							
Cathro-----	3	6w							
Hamre-----	3	6w							
Seelyeville-----	2	6w							
B206A-----			---	---	6.0	---	---	---	---
Hamre-----	80	6w							
Chilgren-----	8	2w							
Northwood-----	5	6w							
Cathro-----	3	6w							
Grygla-----	2	4w							
Roliss-----	2	2w							
I1A-----			5.0	6.0	---	30	2000	85	50
Augsburg-----	75	2w							
Borup-----	10	2w							
Foxlake-----	5	2w							
Augsburg, depressiona-----	3	6w							
Wheatville-----	3	2s							
Glyndon-----	2	2s							
Espelie-----	1	2w							
Hattie-----	1	2e							
I2A-----			5.0	6.0	---	30	2000	85	50
Augsburg-----	75	2w							
Borup-----	10	2w							
Foxlake-----	5	2w							
Augsburg, depressiona-----	3	6w							
Wheatville-----	3	2s							
Glyndon-----	2	2s							
Espelie-----	1	2w							
Hattie-----	1	2e							

See footnote at end of table.

Table 7.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Pct. of map unit	Land capability	Alfalfa hay	Bromegrass-alfalfa	Reed canarygrass	Soybeans	Sunflowers	Barley	Spring wheat
			Tons	AUM*	Tons	Bu	Lbs	Bu	Bu
I3A-----			---	---	4.5	---	---	---	---
Berner-----	80	6w							
Northwood-----	7	6w							
Kratka-----	5	2w							
Hamre-----	3	6w							
Strathcona-----	3	2w							
Seelyeville-----	2	6w							
I4A-----			---	---	4.0	---	---	---	---
Berner-----	30	6w							
Rosewood, depressiona--	30	6w							
Strathcona, depressiona	30	6w							
Rosewood-----	4	3w							
Deerwood-----	2	6w							
Mavie-----	2	3w							
Strathcona-----	2	2w							
I5A-----			5.0	6.0	---	30	2000	85	50
Borup-----	75	2w							
Glyndon-----	9	2s							
Rosewood-----	8	3w							
Augsburg-----	5	2w							
Augsburg, depressiona--	3	6w							
I6A-----			5.0	6.0	---	30	2000	85	50
Borup-----	75	2w							
Glyndon-----	9	2s							
Rosewood-----	8	3w							
Augsburg-----	5	2w							
Augsburg, depressiona--	3	6w							
I7A-----			---	---	4.0	---	---	---	---
Bowstring-----	45	6w							
Fluvaquents-----	45	6w							
Hapludolls-----	5	2e							
Water-----	5	---							
I8A-----			---	---	5.5	---	---	---	---
Cathro-----	80	6w							
Hamre-----	8	6w							
Northwood-----	3	6w							
Roliss-----	3	2w							
Berner-----	2	6w							
Kratka-----	2	2w							
Seelyeville-----	2	6w							

See footnote at end of table.

Table 7.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Pct. of map unit	Land capability	Alfalfa hay	Bromegrass-alfalfa	Reed canarygrass	Soybeans	Sunflowers	Barley	Spring wheat
			Tons	AUM*	Tons	Bu	Lbs	Bu	Bu
I9A-----			4.0	5.0	---	30	1800	80	45
Clearwater-----	80	2w							
Clearwater, very cobbly	5	2w							
Reis-----	5	2w							
Clearwater, depressional	3	6w							
Espelie-----	3	2w							
Foxlake-----	2	2w							
Hattie-----	1	2e							
Huot-----	1	2s							
I10A-----			---	---	5.0	---	---	---	---
Clearwater, depressional	85	6w							
Clearwater-----	9	2w							
Augsburg, depressional--	3	6w							
Reis-----	2	2w							
Espelie-----	1	2w							
I11A-----			---	---	5.0	---	---	---	---
Deerwood-----	85	6w							
Rosewood-----	6	3w							
Markey-----	3	6w							
Strathcona-----	2	2w							
Syrene-----	2	4w							
Venlo-----	2	6w							
I12A-----			5.0	6.0	---	30	1400	65	35
Eckvoll-----	70	3s							
Kratka-----	8	2w							
Smiley-----	7	2w							
Linveltd-----	5	3s							
Reiner-----	5	1							
Foldahl-----	2	3s							
Pelan-----	2	3s							
Poppleton-----	1	4s							
I13A-----			4.0	4.5	---	30	1500	70	40
Espelie-----	75	2w							
Foxlake-----	8	2w							
Hilaire-----	7	3s							
Clearwater, depressional	5	6w							
Thiefriver-----	5	2w							

See footnote at end of table.

Table 7.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Pct. of map unit	Land capability	Alfalfa hay	Bromegrass-alfalfa	Reed canarygrass	Soybeans	Sunflowers	Barley	Spring wheat
			Tons	AUM*	Tons	Bu	Lbs	Bu	Bu
I14B-----			4.0	5.5	---	35	1600	75	40
Fairdale-----	85	2e							
Fluvaquents-----	6	6w							
Hapludolls-----	5	2e							
Hapludalfs-----	2	6e							
Zell-----	2	6e							
I14D-----			3.5	5.5	---	20	1200	55	30
Fairdale-----	85	3e							
Fluvaquents-----	6	6w							
Hapludolls-----	4	2e							
Zell-----	3	6e							
Hapludalfs-----	2	6e							
I15A-----			4.5	5.5	---	30	1200	60	35
Flaming-----	70	4s							
Garborg-----	10	3w							
Hamar-----	5	3w							
Ulen-----	5	3s							
Poppleton-----	3	4s							
Sandberg-----	3	4s							
Foldahl-----	2	3s							
Radium-----	2	4s							
I16F-----			---	6.0	4.0	---	---	---	---
Fluvaquents-----	55	6w							
Hapludolls-----	25	2e							
Hapludalfs-----	7	6e							
Fairdale-----	5	3e							
Water-----	5	---							
Bowstring-----	2	6w							
Rauville-----	1	6w							
I17A-----			4.0	5.5	---	35	1600	75	40
Foldahl-----	75	2s							
Kratka-----	10	2w							
Roliss-----	5	2w							
Flaming-----	4	4s							
Grimstad-----	2	2s							
Linveltd-----	2	3s							
Eckvoll-----	1	3s							
Strathcona-----	1	2w							

See footnote at end of table.

Table 7.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Pct. of map unit	Land capability	Alfalfa hay	Bromegrass-alfalfa	Reed canarygrass	Soybeans	Sunflowers	Barley	Spring wheat
			Tons	AUM*	Tons	Bu	Lbs	Bu	Bu
I18A-----			4.0	5.0	---	30	1400	70	40
Foldahl-----	75	3s							
Kratka-----	10	2w							
Roliss-----	5	2w							
Flaming-----	4	4s							
Grimstad-----	2	2s							
Linveltd-----	2	3s							
Eckvoll-----	1	3s							
Strathcona-----	1	2w							
I19A-----			4.0	5.0	---	25	1200	55	30
Foxhome-----	65	3e							
Kittson-----	10	1							
Strandquist-----	10	3w							
Foldahl-----	5	2s							
Grimstad-----	5	2s							
Roliss-----	3	2w							
Mavie-----	2	3w							
I20A-----			4.0	5.0	---	30	1800	80	40
Foxlake-----	75	2w							
Clearwater-----	5	2w							
Foxlake, very cobbly----	5	2w							
Augsburg-----	3	2w							
Clearwater, depressional	3	6w							
Espelie-----	3	2w							
Hilaire-----	2	3s							
Reis-----	2	2w							
Wheatville-----	2	2s							
I21A-----			5.0	6.0	---	30	1800	85	45
Fram-----	85	2e							
Hedman-----	12	2w							
Strathcona-----	2	2w							
Foxhome-----	1	3e							
I22A-----			6.0	7.0	---	45	2500	95	55
Glyndon-----	75	2s							
Borup-----	10	2w							
Augsburg-----	5	2w							
Ulen-----	5	3s							
Wheatville-----	3	2s							
Flaming-----	2	4s							

See footnote at end of table.

Table 7.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Pct. of map unit	Land capability	Alfalfa hay	Bromegrass-alfalfa	Reed canarygrass	Soybeans	Sunflowers	Barley	Spring wheat
			Tons	AUM*	Tons	Bu	Lbs	Bu	Bu
I23A-----			6.0	7.0	---	45	2500	95	55
Glyndon-----	75	2s							
Borup-----	10	2w							
Augsburg-----	5	2w							
Ulen-----	5	3s							
Wheatville-----	3	2s							
Flaming-----	2	4s							
I24A-----			5.0	6.0	---	30	1600	75	40
Grimstad-----	70	2s							
Strathcona-----	12	2w							
Foldahl-----	5	2s							
Hamerly-----	5	2s							
Foxhome-----	2	3e							
Karlsruhe-----	2	4e							
Mavie-----	2	3w							
Ulen-----	2	3s							
I25A-----			3.5	4.0	---	25	1300	55	35
Hamar-----	75	3w							
Garborg-----	10	3w							
Rosewood-----	7	3w							
Venlo-----	3	6w							
Flaming-----	2	4s							
Hangaard-----	2	4w							
Kratka-----	1	2w							
I26A-----			6.0	7.0	---	35	2200	90	50
Hamerly-----	75	2s							
Vallers-----	12	2w							
Foxhome-----	3	3e							
Grimstad-----	3	2s							
Hamerly, very cobbly----	3	2s							
Strathcona-----	3	2w							
Roliss, depressional----	1	6w							
I27A-----			---	---	6.0	---	---	---	---
Hamre-----	80	6w							
Northwood-----	5	6w							
Roliss-----	5	2w							
Smiley-----	5	2w							
Cathro-----	3	6w							
Kratka-----	2	2w							

See footnote at end of table.

Table 7.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Pct. of map unit	Land capability	Alfalfa hay	Bromegrass-alfalfa	Reed canarygrass	Soybeans	Sunflowers	Barley	Spring wheat
			Tons	AUM*	Tons	Bu	Lbs	Bu	Bu
I28A-----			3.0	3.5	---	20	1100	40	25
Hangaard-----	75	4w							
Hamar-----	7	3w							
Syrene-----	7	4w							
Karlsruhe-----	3	4e							
Rosewood-----	3	3w							
Strandquist-----	3	3w							
Deerwood-----	2	6w							
I29A-----			4.5	5.5	---	35	2000	90	45
Hattie-----	75	2e							
Clearwater-----	12	2w							
Reis-----	6	2w							
Hattie, very cobbly----	5	2e							
Hilaire-----	2	2s							
I29D-----			2.0	3.0	---	---	---	---	---
Hattie-----	85	4e							
Clearwater-----	6	2w							
Hattie, level-----	5	2e							
Boyerlake-----	4	2e							
I30A-----			4.0	5.0	---	25	1600	75	40
Hedman-----	85	2w							
Fram-----	5	2e							
Strathcona-----	5	2w							
Haug-----	3	6w							
Strandquist-----	2	3w							
I31A-----			4.0	5.0	---	25	1700	80	40
Hedman-----	50	2w							
Fram-----	40	2e							
Strathcona-----	5	2w							
Haug-----	3	6w							
Strandquist-----	2	3w							
I32A-----			5.0	6.0	---	30	1600	75	40
Hilaire-----	75	2s							
Espelie-----	12	2w							
Huot-----	5	2s							
Flaming-----	2	4s							
Foxlake-----	2	2w							
Wheatville-----	2	2s							
Thiefriver-----	1	2w							
Wyandotte-----	1	3w							

See footnote at end of table.

Table 7.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Pct. of map unit	Land capability	Alfalfa hay	Bromegrass-alfalfa	Reed canarygrass	Soybeans	Sunflowers	Barley	Spring wheat
			Tons	AUM*	Tons	Bu	Lbs	Bu	Bu
I33A-----			5.0	6.0	---	25	1400	70	35
Hilaire-----	75	3s							
Espelle-----	12	2w							
Huot-----	5	2s							
Flaming-----	2	4s							
Foxlake-----	2	2w							
Wheatville-----	2	2s							
Thiefriver-----	1	2w							
Wyandotte-----	1	3w							
I34A-----			5.0	6.0	---	30	1600	75	40
Huot-----	75	2s							
Thiefriver-----	12	2w							
Hilaire-----	5	2s							
Flaming-----	3	4s							
Foxlake-----	3	2w							
Ulen-----	2	3s							
I35A-----			3.5	4.0	---	15	1100	35	25
Karlsruhe-----	70	4e							
Syrene-----	10	4w							
Ulen-----	10	3s							
Radium-----	5	4s							
Rosewood-----	3	3w							
Sandberg-----	2	4s							
I36A-----			6.0	7.0	---	35	2200	90	50
Kittson-----	70	1							
Roliss-----	12	2w							
Hamerly-----	5	2s							
Kratka-----	5	2w							
Grimstad-----	3	2s							
Strandquist-----	3	3w							
Foxhome-----	2	3e							
I37A-----			---	---	4.5	---	---	---	---
Kratka, depressional----	45	2w							
Strathcona, depressional	45	6w							
Northwood-----	5	6w							
Kratka-----	2	2w							
Strathcona-----	2	2w							
Roliss-----	1	2w							

See footnote at end of table.

Table 7.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Pct. of map unit	Land capability	Alfalfa hay	Bromegrass-alfalfa	Reed canarygrass	Soybeans	Sunflowers	Barley	Spring wheat
			Tons	AUM*	Tons	Bu	Lbs	Bu	Bu
I38A-----			4.0	4.5	---	30	1600	70	40
Kratka-----	70	2w							
Smiley-----	7	2w							
Foldahl-----	5	2s							
Kratka, very cobbly----	5	2w							
Strathcona-----	5	2w							
Kratka, depressional----	3	2w							
Strandquist-----	3	3w							
Linveltd-----	2	3s							
I39A-----			5.0	6.0	---	30	1600	75	40
Linveltd-----	65	3s							
Kratka-----	14	2w							
Reiner-----	10	1							
Smiley-----	5	2w							
Eckvoll-----	3	3s							
Foldahl-----	2	2s							
Pelan-----	1	3s							
I40B-----			3.0	4.0	---	---	---	25	15
Maddock-----	85	4s							
Flaming-----	5	4s							
Sandberg-----	5	4s							
Halverson-----	3	3s							
Hamar-----	2	3w							
I40F-----			---	3.0	---	---	---	---	---
Maddock-----	90	6s							
Flaming-----	5	4s							
Sandberg-----	5	4s							
I41A-----			---	---	4.5	---	---	---	---
Markey-----	80	6w							
Deerwood-----	12	6w							
Berner-----	2	6w							
Hamar-----	2	3w							
Seelyeville-----	2	6w							
Syrene-----	2	4w							
I42A-----			---	---	---	---	---	---	---
Markey, ponded-----	85	8w							
Markey-----	5	6w							
Deerwood-----	4	6w							
Seelyeville, ponded----	4	8w							
Hamar-----	1	3w							
Hangaard-----	1	4w							

See footnote at end of table.

Table 7.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Pct. of map unit	Land capability	Alfalfa hay	Bromegrass-alfalfa	Reed canarygrass	Soybeans	Sunflowers	Barley	Spring wheat
			Tons	AUM*	Tons	Bu	Lbs	Bu	Bu
I43A-----			3.5	4.0	---	25	1300	60	35
Mavie-----	70	3w							
Vallers-----	10	2w							
Strandquist-----	7	3w							
Strathcona-----	5	2w							
Strathcona, depressional	3	6w							
Foxhome-----	2	3e							
Karlsruhe-----	2	4e							
Grimstad-----	1	2s							
I44A-----			5.0	6.5	---	35	2100	90	50
Newfolden-----	75	2s							
Smiley-----	12	2w							
Boash-----	8	2w							
Linveltd-----	4	3s							
Hapludolls-----	1	2e							
I45A-----			---	---	5.5	---	---	---	---
Northwood-----	75	6w							
Hamre-----	10	6w							
Berner-----	5	6w							
Kratka-----	5	2w							
Strandquist-----	3	3w							
Roliss-----	2	2w							
I46A-----			---	---	---	---	---	---	---
Pits-----	85	---							
Udipsamments-----	10	8s							
Radium-----	2	4s							
Maddock-----	1	4s							
Marquette-----	1	4s							
Sandberg-----	1	4s							
I47A-----			3.5	4.0	---	15	800	35	20
Poppleton-----	75	4s							
Flaming-----	12	4s							
Garborg-----	5	3w							
Hamar-----	3	3w							
Radium-----	2	4s							
Ulen-----	2	3s							
Maddock-----	1	4s							

See footnote at end of table.

Table 7.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Pct. of map unit	Land capability	Alfalfa hay	Bromegrass- alfalfa	Reed canarygrass	Soybeans	Sunflowers	Barley	Spring wheat
			Tons	AUM*	Tons	Bu	Lbs	Bu	Bu
I48A-----			3.5	4.0	---	15	1000	35	20
Radium-----	75	4s							
Sandberg-----	7	4s							
Oylen-----	5	3s							
Flaming-----	4	4s							
Garborg-----	3	3w							
Hangaard-----	3	4w							
Hamar-----	2	3w							
Poppleton-----	1	4s							
I49A-----			---	---	4.5	---	---	---	---
Rauville-----	80	6w							
Fluvaquents-----	12	6w							
Water-----	5	---							
Lamoure-----	3	2w							
I50A-----			6.0	7.0	---	35	2100	90	50
Reiner-----	70	1							
Smiley-----	12	2w							
Reiner, very cobbly----	7	1							
Linveltd-----	5	3s							
Eckvoll-----	3	3s							
Kratka-----	3	2w							
I51A-----			6.0	7.0	---	30	1900	85	45
Reiner-----	65	2s							
Smiley-----	9	2w							
Reiner fine sandy loam--	8	1							
Linveltd-----	7	3s							
Kratka-----	5	2w							
Eckvoll-----	3	3s							
Reiner, very cobbly----	3	1							
I52A-----			4.0	5.0	---	30	1900	85	45
Reis-----	55	2w							
Clearwater-----	30	2w							
Clearwater, very cobbly-	5	2w							
Clearwater, depressiona-	3	6w							
Espelie-----	3	2w							
Hattie-----	3	2e							
Wyandotte-----	1	3w							

See footnote at end of table.

Table 7.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Pct. of map unit	Land capability	Alfalfa hay	Bromegrass-alfalfa	Reed canarygrass	Soybeans	Sunflowers	Barley	Spring wheat
			Tons	AUM*	Tons	Bu	Lbs	Bu	Bu
I53A-----			5.0	6.0	---	30	1800	85	45
Roliss-----	75	2w							
Kratka-----	8	2w							
Roliss, very cobbly----	7	2w							
Kittson-----	5	1							
Roliss, depressiona-----	3	6w							
Smiley-----	2	2w							
I54A-----			---	---	5.0	---	---	---	---
Roliss, depressiona-----	80	6w							
Roliss-----	12	2w							
Hamre-----	5	6w							
Kratka-----	3	2w							
I55A-----			3.5	4.0	---	25	1300	55	30
Rosewood-----	75	3w							
Ulen-----	10	3s							
Hamar-----	6	3w							
Rosewood, depressiona--	3	6w							
Syrene-----	3	4w							
Karlsruhe-----	1	4e							
Strathcona-----	1	2w							
Thiefriever-----	1	2w							
I56A-----			---	---	4.0	---	800	35	25
Rosewood-----	50	3w							
Venlo-----	40	6w							
Deerwood-----	3	6w							
Syrene-----	3	4w							
Ulen-----	2	3s							
Strathcona-----	1	2w							
Thiefriever-----	1	2w							
I57B-----			3.5	4.5	---	15	900	30	15
Sandberg-----	50	4s							
Radium-----	25	4s							
Sioux-----	8	6s							
Oylen-----	7	3s							
Flaming-----	5	4s							
Garborg-----	5	3w							

See footnote at end of table.

Table 7.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Pct. of map unit	Land capability	Alfalfa hay	Bromegrass-alfalfa	Reed canarygrass	Soybeans	Sunflowers	Barley	Spring wheat
			Tons	AUM*	Tons	Bu	Lbs	Bu	Bu
I58A-----			---	---	5.5	---	---	---	---
Seelyeville-----	90	6w							
Cathro-----	3	6w							
Dora-----	3	6w							
Markey-----	3	6w							
Berner-----	1	6w							
I59A-----			5.0	6.0	---	30	1800	85	45
Smiley-----	65	2w							
Smiley, very cobbly----	10	2w							
Kratka-----	9	2w							
Roliss-----	5	2w							
Reiner-----	4	1							
Linveldt-----	3	3s							
Smiley, depressional----	3	6w							
Strandquist-----	1	3w							
I60A-----			---	---	5.0	---	---	---	---
Smiley, depressional----	80	6w							
Smiley-----	10	2w							
Hamre-----	5	6w							
Kratka-----	5	2w							
I61A-----			3.5	4.0	---	25	1300	60	35
Strandquist-----	70	3w							
Mavie-----	8	3w							
Roliss-----	7	2w							
Kratka-----	5	2w							
Foxhome-----	4	3e							
Hangaard-----	3	4w							
Northwood-----	3	6w							
I62A-----			3.0	3.5	---	20	1000	40	25
Syrene-----	70	4w							
Rosewood-----	11	3w							
Hangaard-----	5	4w							
Karlsruhe-----	4	4e							
Deerwood-----	3	6w							
Hamar-----	3	3w							
Strandquist-----	2	3w							
Radium-----	1	4s							
Wyandotte-----	1	3w							

See footnote at end of table.

Table 7.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Pct. of map unit	Land capability	Alfalfa hay	Bromegrass-alfalfa	Reed canarygrass	Soybeans	Sunflowers	Barley	Spring wheat
			Tons	AUM*	Tons	Bu	Lbs	Bu	Bu
I63A-----			4.0	4.5	---	30	1500	70	40
Thiefriever-----	70	2w							
Espelle-----	10	2w							
Foxlake-----	7	2w							
Huot-----	5	2s							
Clearwater, depressional	3	6w							
Rosewood-----	3	3w							
Ulen-----	1	3s							
Wyandotte-----	1	3w							
I64A-----			4.5	5.5	---	30	1200	60	35
Ulen-----	70	3s							
Rosewood-----	10	3w							
Flaming-----	8	4s							
Karlsruhe-----	5	4e							
Radium-----	3	4s							
Strathcona-----	2	2w							
Thiefriever-----	2	2w							
I65A-----			4.5	5.5	---	25	1100	55	30
Ulen-----	70	3s							
Rosewood-----	10	3w							
Flaming-----	6	4s							
Poppleton-----	4	4s							
Karlsruhe-----	3	4e							
Radium-----	3	4s							
Strathcona-----	2	2w							
Thiefriever-----	2	2w							
I66A-----			5.0	6.0	---	30	1800	85	45
Vallers-----	75	2w							
Vallers, very cobbly----	7	2w							
Hamerly-----	6	2s							
Grimstad-----	3	2s							
Mavie-----	3	3w							
Roliss, depressional----	3	6w							
Strathcona-----	3	2w							
I67A-----			6.0	7.0	---	45	2500	95	55
Wheatville-----	70	2s							
Augsburg-----	13	2w							
Glyndon-----	8	2s							
Foxlake-----	5	2w							
Hilaire-----	2	3s							
Ulen-----	2	3s							

See footnote at end of table.

Table 7.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Pct. of map unit	Land capability	Alfalfa hay	Bromegrass-alfalfa	Reed canarygrass	Soybeans	Sunflowers	Barley	Spring wheat
			Tons	AUM*	Tons	Bu	Lbs	Bu	Bu
I68A-----			6.0	7.0	---	45	2500	95	55
Wheatville-----	70	2s							
Augsburg-----	13	2w							
Glyndon-----	8	2s							
Foxlake-----	5	2w							
Hilaire-----	2	3s							
Ulen-----	2	3s							
I69A-----			3.5	4.0	---	25	1300	60	35
Wyandotte-----	65	3w							
Foxlake-----	10	2w							
Espelie-----	8	2w							
Clearwater, depressional	5	6w							
Thiefriever-----	5	2w							
Karlsruhe-----	4	4e							
Syrene-----	3	4w							
I70A-----			4.0	4.5	---	30	1600	70	40
Strathcona-----	70	2w							
Kratka-----	10	2w							
Roliss-----	6	2w							
Grimstad-----	5	2s							
Mavie-----	3	3w							
Rosewood-----	3	3w							
Strathcona, depressional	3	6w							
M-W. Miscellaneous water									
W. Water									

\* Animal unit month: The amount of forage or feed required to feed one animal unit (one cow, one horse, one mule, five sheep, or five goats) for 30 days.

Table 8.--Forage Suitability Groups

(See text for an explanation of forage suitability groups)

Map symbol and soil name	Forage suitability group
B109A:	
Bowstring-----	16
Fluvaquents-----	16
Hapludalfs-----	23
Seelyeville-----	14
Water-----	---
B200A:	
Garnes-----	02
Chilgren-----	01
Eckvoll-----	02
Garnes, very stony---	02
Grygla-----	01
Pelan-----	02
B201A:	
Chilgren-----	01
Garnes-----	02
Grygla-----	01
Grygla, depressional--	13
Hamre-----	13
Pelan-----	02
B202A:	
Cathro-----	14
Hamre-----	13
Chilgren-----	01
Northwood-----	13
Berner-----	14
Grygla-----	01
Seelyeville-----	14
B203A:	
Northwood-----	13
Hamre-----	13
Grygla-----	01

Table 8.--Forage Suitability Groups--Continued

Map symbol and soil name	Forage suitability group
B203A:	
Berner-----	14
Chilgren-----	01
B204A:	
Roliss-----	09
Grygla-----	01
Chilgren-----	01
Garnes-----	02
Roliss, depressiona--	13
Hamre-----	13
B205A:	
Berner-----	14
Northwood-----	13
Grygla-----	01
Cathro-----	14
Hamre-----	13
Seelyeville-----	14
B206A:	
Hamre-----	13
Chilgren-----	01
Northwood-----	13
Cathro-----	14
Grygla-----	01
Roliss-----	09
I1A:	
Augsburg-----	09
Borup-----	09
Foxlake-----	09
Augsburg, depressiona	13
Wheatville-----	10
Glyndon-----	10
Espelie-----	01
Hattie-----	10

Table 8.--Forage Suitability Groups--Continued

Map symbol and soil name	Forage suitability group
<b>I2A:</b>	
Augsburg-----	09
Borup-----	09
Foxlake-----	09
Augsburg, depressional	13
Wheatville-----	10
Glyndon-----	10
Espelie-----	01
Hattie-----	10
<b>I3A:</b>	
Berner-----	14
Northwood-----	13
Kratka-----	01
Hamre-----	13
Strathcona-----	09
Seelyeville-----	14
<b>I4A:</b>	
Berner-----	14
Rosewood, depressional	13
Strathcona, depressional-----	13
Rosewood-----	11
Deerwood-----	13
Mavie-----	09
Strathcona-----	09
<b>I5A:</b>	
Borup-----	09
Glyndon-----	10
Rosewood-----	11
Augsburg-----	09
Augsburg, depressional	13
<b>I6A:</b>	
Borup-----	09
Glyndon-----	10
Rosewood-----	11

Table 8.--Forage Suitability Groups--Continued

Map symbol and soil name	Forage suitability group
I6A:	
Augsburg-----	09
Augsburg, depressiona	13
I7A:	
Bowstring-----	16
Fluvaquents-----	16
Hapludolls-----	17
Water-----	---
I8A:	
Cathro-----	14
Hamre-----	13
Northwood-----	13
Roliss-----	09
Berner-----	14
Kratka-----	01
Seelyeville-----	14
I9A:	
Clearwater-----	01
Clearwater, very cobble-----	01
Reis-----	09
Clearwater, depressiona -----	13
Espelie-----	01
Foxlake-----	09
Hattie-----	10
Huot-----	10
I10A:	
Clearwater, depressiona -----	13
Clearwater-----	01
Augsburg, depressiona	13
Reis-----	09
Espelie-----	01

Table 8.--Forage Suitability Groups--Continued

Map symbol and soil name	Forage suitability group
<b>I11A:</b>	
Deerwood-----	13
Rosewood-----	11
Markey-----	14
Strathcona-----	09
Syrene-----	11
Venlo-----	13
<b>I12A:</b>	
Eckvoll-----	02
Kratka-----	01
Smiley-----	01
Linveldt-----	02
Reiner-----	02
Foldahl-----	02
Pelan-----	02
Poppleton-----	04
<b>I13A:</b>	
Espelie-----	01
Foxlake-----	09
Hilaire-----	02
Clearwater, depressional-----	13
Thiefriver-----	09
<b>I14B:</b>	
Fairdale-----	10
Fluvaquents-----	16
Hapludolls-----	17
Hapludalfs-----	23
Zell-----	23
<b>I14D:</b>	
Fairdale-----	23
Fluvaquents-----	16
Hapludolls-----	17
Zell-----	23
Hapludalfs-----	23

Table 8.--Forage Suitability Groups--Continued

Map symbol and soil name	Forage suitability group
I15A:	
Flaming-----	04
Garborg-----	04
Hamar-----	03
Ulen-----	12
Poppleton-----	04
Sandberg-----	04
Foldahl-----	02
Radium-----	04
I16F:	
Fluvaquents-----	16
Hapludolls-----	17
Hapludalfs-----	23
Fairdale-----	23
Water-----	---
Bowstring-----	16
Rauville-----	13
I17A:	
Foldahl-----	02
Kratka-----	01
Roliss-----	09
Flaming-----	04
Grimstad-----	10
Linveldt-----	02
Eckvoll-----	02
Strathcona-----	09
I18A:	
Foldahl-----	02
Kratka-----	01
Roliss-----	09
Flaming-----	04
Grimstad-----	10
Linveldt-----	02

Table 8.--Forage Suitability Groups--Continued

Map symbol and soil name	Forage suitability group
I18A:	
Eckvoll-----	02
Strathcona-----	09
I19A:	
Foxhome-----	02
Kittson-----	02
Strandquist-----	09
Foldahl-----	02
Grimstad-----	10
Roliss-----	09
Mavie-----	09
I20A:	
Foxlake-----	09
Clearwater-----	01
Foxlake, very cobbly--	09
Augsburg-----	09
Clearwater, depressional-----	13
Espelie-----	01
Hilaire-----	02
Reis-----	09
Wheatville-----	10
I21A:	
Fram-----	10
Hedman-----	09
Strathcona-----	09
Foxhome-----	02
I22A:	
Glyndon-----	10
Borup-----	09
Augsburg-----	09
Ulen-----	12
Wheatville-----	10
Flaming-----	04

Table 8.--Forage Suitability Groups--Continued

Map symbol and soil name	Forage suitability group
I23A:	
Glyndon-----	10
Borup-----	09
Augsburg-----	09
Ulen-----	12
Wheatville-----	10
Flaming-----	04
I24A:	
Grimstad-----	10
Strathcona-----	09
Foldahl-----	02
Hamerly-----	10
Foxhome-----	02
Karlsruhe-----	12
Mavie-----	09
Ulen-----	12
I25A:	
Hamar-----	03
Garborg-----	04
Rosewood-----	11
Venlo-----	13
Flaming-----	04
Hangaard-----	03
Kratka-----	01
I26A:	
Hamerly-----	10
Vallers-----	09
Foxhome-----	02
Grimstad-----	10
Hamerly, very cobbly--	10
Strathcona-----	09
Roliss, depressional--	13

Table 8.--Forage Suitability Groups--Continued

Map symbol and soil name	Forage suitability group
I27A:	
Hamre-----	13
Northwood-----	13
Roliss-----	09
Smiley-----	01
Cathro-----	14
Kratka-----	01
I28A:	
Hangaard-----	03
Hamar-----	03
Syrene-----	11
Karlsruhe-----	12
Rosewood-----	11
Strandquist-----	09
Deerwood-----	13
I29A:	
Hattie-----	10
Clearwater-----	01
Reis-----	09
Hattie, very cobbly---	10
Hilaire-----	02
I29D:	
Hattie-----	23
Clearwater-----	01
Hattie, level-----	10
Boyerlake-----	10
I30A:	
Hedman-----	09
Fram-----	10
Strathcona-----	09
Haug-----	13
Strandquist-----	09
I31A:	
Hedman-----	09
Fram-----	10

Table 8.--Forage Suitability Groups--Continued

Map symbol and soil name	Forage suitability group
I31A: Strathcona-----	09
Haug-----	13
Strandquist-----	09
I32A: Hilaire-----	02
Espelie-----	01
Huot-----	10
Flaming-----	04
Foxlake-----	09
Wheatville-----	10
Thiefriever-----	09
Wyandotte-----	09
I33A: Hilaire-----	02
Espelie-----	01
Huot-----	10
Flaming-----	04
Foxlake-----	09
Wheatville-----	10
Thiefriever-----	09
Wyandotte-----	09
I34A: Huot-----	10
Thiefriever-----	09
Hilaire-----	02
Flaming-----	04
Foxlake-----	09
Ulen-----	12
I35A: Karlsruhe-----	12
Syrene-----	11
Ulen-----	12
Radium-----	04

Table 8.--Forage Suitability Groups--Continued

Map symbol and soil name	Forage suitability group
<b>I35A:</b>	
Rosewood-----	11
Sandberg-----	04
<b>I36A:</b>	
Kittson-----	02
Roliss-----	09
Hamerly-----	10
Kratka-----	01
Grimstad-----	10
Strandquist-----	09
Foxhome-----	02
<b>I37A:</b>	
Kratka, depressional--	13
Strathcona, depressional-----	13
Northwood-----	13
Kratka-----	01
Strathcona-----	09
Roliss-----	09
<b>I38A:</b>	
Kratka-----	01
Smiley-----	01
Foldahl-----	02
Kratka, very cobbly---	01
Strathcona-----	09
Kratka, depressional--	13
Strandquist-----	09
Linveltdt-----	02
<b>I39A:</b>	
Linveltdt-----	02
Kratka-----	01
Reiner-----	02
Smiley-----	01
Eckvoll-----	02

Table 8.--Forage Suitability Groups--Continued

Map symbol and soil name	Forage suitability group
I39A:	
Foldahl-----	02
Pelan-----	02
I40B:	
Maddock-----	04
Flaming-----	04
Sandberg-----	04
Halverson-----	02
Hamar-----	03
I40F:	
Maddock-----	18
Flaming-----	04
Sandberg-----	04
I41A:	
Markey-----	14
Deerwood-----	13
Berner-----	14
Hamar-----	03
Seelyeville-----	14
Syrene-----	11
I42A:	
Markey, ponded-----	24
Markey-----	14
Deerwood-----	13
Seelyeville, ponded---	24
Hamar-----	03
Hangaard-----	03
I43A:	
Mavie-----	09
Vallers-----	09
Strandquist-----	09
Strathcona-----	09
Strathcona, depressional-----	13
Foxhome-----	02

Table 8.--Forage Suitability Groups--Continued

Map symbol and soil name	Forage suitability group
I43A:	
Karlsruhe-----	12
Grimstad-----	10
I44A:	
Newfolden-----	02
Smiley-----	01
Boash-----	09
Linveldt-----	02
Hapludolls-----	17
I45A:	
Northwood-----	13
Hamre-----	13
Berner-----	14
Kratka-----	01
Strandquist-----	09
Roliss-----	09
I46A:	
Pits-----	---
Udipsamments-----	---
Radium-----	04
Maddock-----	04
Marquette-----	22
Sandberg-----	04
I47A:	
Poppleton-----	04
Flaming-----	04
Garborg-----	04
Hamar-----	03
Radium-----	04
Ulen-----	12
Maddock-----	04
I48A:	
Radium-----	04
Sandberg-----	04

Table 8.--Forage Suitability Groups--Continued

Map symbol and soil name	Forage suitability group
I48A:	
Cylen-----	08
Flaming-----	04
Garborg-----	04
Hangaard-----	03
Hamar-----	03
Poppleton-----	04
I49A:	
Rauville-----	13
Fluvaquents-----	16
Water-----	---
Lamoure-----	16
I50A:	
Reiner-----	02
Smiley-----	01
Reiner, very cobbly---	02
Linveldt-----	02
Eckvoll-----	02
Kratka-----	01
I51A:	
Reiner-----	02
Smiley-----	01
Reiner fine sandy loam	02
Linveldt-----	02
Kratka-----	01
Eckvoll-----	02
Reiner, very cobbly---	02
I52A:	
Reis-----	09
Clearwater-----	01
Clearwater, very cobbly-----	01
Clearwater, depressional-----	13
Espelie-----	01

Table 8.--Forage Suitability Groups--Continued

Map symbol and soil name	Forage suitability group
I52A:	
Hattie-----	10
Wyandotte-----	09
I53A:	
Roliss-----	09
Kratka-----	01
Roliss, very cobbly---	09
Kittson-----	02
Roliss, depressional--	13
Smiley-----	01
I54A:	
Roliss, depressional--	13
Roliss-----	09
Hamre-----	13
Kratka-----	01
I55A:	
Rosewood-----	11
Ulen-----	12
Hamar-----	03
Rosewood, depressional	13
Syrene-----	11
Karlsruhe-----	12
Strathcona-----	09
Thiefriever-----	09
I56A:	
Rosewood-----	11
Venlo-----	13
Deerwood-----	13
Syrene-----	11
Ulen-----	12
Strathcona-----	09
Thiefriever-----	09

Table 8.--Forage Suitability Groups--Continued

Map symbol and soil name	Forage suitability group
I57B:	
Sandberg-----	04
Radium-----	04
Sioux-----	04
Oylen-----	08
Flaming-----	04
Garborg-----	04
I58A:	
Seelyeville-----	14
Cathro-----	14
Dora-----	14
Markey-----	14
Berner-----	14
I59A:	
Smiley-----	01
Smiley, very cobbly---	01
Kratka-----	01
Roliss-----	09
Reiner-----	02
Linveldt-----	02
Smiley, depressiona--	13
Strandquist-----	09
I60A:	
Smiley, depressiona--	13
Smiley-----	01
Hamre-----	13
Kratka-----	01
I61A:	
Strandquist-----	09
Mavie-----	09
Roliss-----	09
Kratka-----	01
Foxhome-----	02
Hangaard-----	03
Northwood-----	13

Table 8.--Forage Suitability Groups--Continued

Map symbol and soil name	Forage suitability group
I62A:	
Syrene-----	11
Rosewood-----	11
Hangaard-----	03
Karlsruhe-----	12
Deerwood-----	13
Hamar-----	03
Strandquist-----	09
Radium-----	04
Wyandotte-----	09
I63A:	
Thiefriever-----	09
Espelie-----	01
Foxlake-----	09
Huot-----	10
Clearwater, depressional-----	13
Rosewood-----	11
Ulen-----	12
Wyandotte-----	09
I64A:	
Ulen-----	12
Rosewood-----	11
Flaming-----	04
Karlsruhe-----	12
Radium-----	04
Strathcona-----	09
Thiefriever-----	09
I65A:	
Ulen-----	12
Rosewood-----	11
Flaming-----	04
Poppleton-----	04
Karlsruhe-----	12

Table 8.--Forage Suitability Groups--Continued

Map symbol and soil name	Forage suitability group
I65A:	
Radium-----	04
Strathcona-----	09
Thiefriever-----	09
I66A:	
Vallers-----	09
Vallers, very cobbly--	09
Hamerly-----	10
Grimstad-----	10
Mavie-----	09
Roliss, depressional--	13
Strathcona-----	09
I67A:	
Wheatville-----	10
Augsburg-----	09
Glyndon-----	10
Foxlake-----	09
Hilaire-----	02
Ulen-----	12
I68A:	
Wheatville-----	10
Augsburg-----	09
Glyndon-----	10
Foxlake-----	09
Hilaire-----	02
Ulen-----	12
I69A:	
Wyandotte-----	09
Foxlake-----	09
Espelie-----	01
Clearwater, depressional-----	13
Thiefriever-----	09
Karlsruhe-----	12
Syrene-----	11

Table 8.--Forage Suitability Groups--Continued

Map symbol and soil name	Forage suitability group
I70A: Strathcona-----	09
Kratka-----	01
Roliss-----	09
Grimstad-----	10
Mavie-----	09
Rosewood-----	11
Strathcona, depressional-----	13
M-W. Miscellaneous water	
W. Water	

Table 9.--Prime Farmland

(Only the soils considered prime farmland are listed. Urban or built-up areas of the soils listed are not considered prime farmland. If a soil is prime farmland only under certain conditions, the conditions are specified in parentheses after the soil name)

Map symbol	Soil name
B200A	Garnes fine sandy loam, 0 to 3 percent slopes
B201A	Chilgren fine sandy loam, 0 to 2 percent slopes (where drained)
B204A	Roliss loam, MLRA 88, 0 to 2 percent slopes (where drained)
I1A	Augsburg loam, 0 to 2 percent slopes (where drained)
I2A	Augsburg very fine sandy loam, 0 to 2 percent slopes (where drained)
I5A	Borup loam, 0 to 2 percent slopes (where drained)
I6A	Borup very fine sandy loam, 0 to 2 percent slopes (where drained)
I9A	Clearwater clay, 0 to 2 percent slopes (where drained)
I13A	Espelie fine sandy loam, 0 to 2 percent slopes (where drained)
I14B	Fairdale silt loam, 1 to 6 percent slopes, occasionally flooded (where protected from flooding or not frequently flooded during the growing season)
I17A	Foldahl fine sandy loam, 0 to 3 percent slopes
I20A	Foxlake loam, 0 to 2 percent slopes (where drained)
I21A	Fram loam, 1 to 3 percent slopes
I22A	Glyndon loam, 0 to 2 percent slopes
I23A	Glyndon very fine sandy loam, 0 to 2 percent slopes
I24A	Grimstad fine sandy loam, 0 to 3 percent slopes
I26A	Hamerly loam, 0 to 2 percent slopes
I29A	Hattie clay, 0 to 3 percent slopes
I30A	Hedman loam, 0 to 2 percent slopes (where drained)
I31A	Hedman-Fram complex, 0 to 3 percent slopes (where drained)
I32A	Hilaire fine sandy loam, 0 to 3 percent slopes
I34A	Huot fine sandy loam, 0 to 3 percent slopes
I36A	Kittson loam, 0 to 3 percent slopes
I38A	Kratka fine sandy loam, 0 to 2 percent slopes (where drained)
I39A	Linveltdt fine sandy loam, 0 to 3 percent slopes
I44A	Newfolden loam, 0 to 3 percent slopes
I50A	Reiner fine sandy loam, 0 to 3 percent slopes
I51A	Reiner loamy fine sand, 0 to 3 percent slopes
I52A	Reis-Clearwater complex, 0 to 2 percent slopes (where drained)
I53A	Roliss loam, 0 to 2 percent slopes (where drained)
I59A	Smiley loam, 0 to 2 percent slopes (where drained)
I63A	Thiefriver fine sandy loam, 0 to 2 percent slopes (where drained)
I66A	Vallers loam, 0 to 2 percent slopes (where drained)
I67A	Wheatville loam, 0 to 3 percent slopes
I68A	Wheatville very fine sandy loam, 0 to 3 percent slopes
I70A	Strathcona fine sandy loam, 0 to 2 percent slopes (where drained)

Table 10.--Windbreaks and Environmental Plantings

(Only the map units that include soils suitable for windbreaks and environmental plantings are listed. Absence of an entry indicates that trees generally do not grow to the given height)

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
<b>E200A:</b>						
Garnes-----	70	Peking cotoneaster, redosier dogwood, sargent crabapple	American cranberrybush, American plum, common lilac	Blue spruce, eastern arborvitae, eastern redcedar, bur oak, white spruce	Norway spruce, paper birch, eastern white pine, green ash, red pine	Eastern cottonwood, Siouxland cottonwood
Chilgren-----	13	Nanking cherry, Peking cotoneaster, common ninebark, redosier dogwood	American cranberrybush, common lilac	Eastern arborvitae, black ash, white spruce	Paper birch, green ash, white willow	Silver maple, eastern cottonwood
Eckvoll-----	5	Peking cotoneaster, redosier dogwood	American plum, common chokecherry	Blue spruce, eastern redcedar, Manchurian crabapple, Scotch pine, bur oak, white spruce	American basswood, eastern white pine, golden willow	Silver maple, eastern cottonwood
Garnes, very stony-----	5	Peking cotoneaster, redosier dogwood, sargent crabapple	American cranberrybush, American plum, common lilac	Eastern arborvitae, Black Hills spruce, Scotch pine, white spruce	Paper birch, eastern white pine, green ash, red pine	Eastern cottonwood, Siouxland cottonwood
Grygla-----	4	Nanking cherry, Peking cotoneaster, common ninebark, redosier dogwood	American cranberrybush, common lilac	Eastern arborvitae, Black Hills spruce, black ash, white spruce	Paper birch, green ash	Silver maple, Siouxland cottonwood
Pelan-----	3	Peking cotoneaster, redosier dogwood	American plum, common chokecherry, hedge cotoneaster, common lilac, silver buffaloberry	Ponderosa pine, Manchurian crabapple, bur oak, Russian olive	Green ash, Siberian elm	Silver maple, imperial Carolina poplar, eastern cottonwood
<b>E201A:</b>						
Chilgren-----	75	Nanking cherry, Peking cotoneaster, common ninebark, redosier dogwood	American cranberrybush, common lilac	Eastern arborvitae, black ash, white spruce	Paper birch, green ash, white willow	Silver maple, eastern cottonwood

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
<b>E201A:</b>						
Garnes-----	9	Peking cotoneaster, redosier dogwood, sargent crabapple	American cranberrybush, American plum, common lilac	Blue spruce, eastern arborvitae, eastern redcedar, bur oak, white spruce	Norway spruce, paper birch, eastern white pine, green ash, red pine	Eastern cottonwood, Siouxland cottonwood
Grygla-----	5	Nanking cherry, Peking cotoneaster, common ninebark, redosier dogwood	American cranberrybush, common lilac	Eastern arborvitae, Black Hills spruce, black ash, white spruce	Paper birch, green ash	Silver maple, Siouxland cottonwood
Grygla, depressional----	5	---	---	---	---	---
Hamre-----	5	---	---	---	---	---
Pelan-----	1	Peking cotoneaster, redosier dogwood	American plum, common chokecherry, hedge cotoneaster, common lilac, silver buffaloberry	Ponderosa pine, Manchurian crabapple, bur oak, Russian olive	Green ash, Siberian elm	Silver maple, imperial Carolina poplar, eastern cottonwood
<b>E202A:</b>						
Cathro-----	80	---	---	---	---	---
Hamre-----	8	---	---	---	---	---
Chilgren-----	3	Nanking cherry, Peking cotoneaster, common ninebark, redosier dogwood	American cranberrybush, common lilac	Eastern arborvitae, black ash, white spruce	Paper birch, green ash, white willow	Silver maple, eastern cottonwood
Northwood-----	3	---	---	---	---	---
Berner-----	2	---	---	---	---	---
Grygla-----	2	Nanking cherry, Peking cotoneaster, common ninebark, redosier dogwood	American cranberrybush, common lilac	Eastern arborvitae, Black Hills spruce, black ash, white spruce	Paper birch, green ash	Silver maple, Siouxland cottonwood
Seelyeville-----	2	---	---	---	---	---
<b>E203A:</b>						
Northwood-----	75	---	---	---	---	---
Hamre-----	10	---	---	---	---	---

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
B203A:						
Grygla-----	7	Nanking cherry, Peking cotoneaster, common ninebark, redosier dogwood	American cranberrybush, common lilac	Eastern arborvitae, Black Hills spruce, black ash, white spruce	Paper birch, green ash	Silver maple, Siouxland cottonwood
Berner-----	5	---	---	---	---	---
Chilgren-----	3	Nanking cherry, Peking cotoneaster, common ninebark, redosier dogwood	American cranberrybush, common lilac	Eastern arborvitae, black ash, white spruce	Paper birch, green ash, white willow	Silver maple, eastern cottonwood
B204A:						
Roliss-----	75	Redosier dogwood, sargent crabapple	Common chokecherry, common lilac	Eastern arborvitae, Black Hills spruce, bur oak, Russian olive, white spruce	Golden willow, Siberian elm	Imperial Carolina poplar, eastern cottonwood, Siouxland cottonwood
Grygla-----	8	Nanking cherry, Peking cotoneaster, common ninebark, redosier dogwood	American cranberrybush, common lilac	Eastern arborvitae, Black Hills spruce, black ash, white spruce	Paper birch, green ash	Silver maple, Siouxland cottonwood
Chilgren-----	5	Nanking cherry, Peking cotoneaster, common ninebark, redosier dogwood	American cranberrybush, common lilac	Eastern arborvitae, black ash, white spruce	Paper birch, green ash, white willow	Silver maple, eastern cottonwood
Garnes-----	5	Peking cotoneaster, redosier dogwood, sargent crabapple	American cranberrybush, American plum, common lilac	Blue spruce, eastern arborvitae, eastern redcedar, bur oak, white spruce	Norway spruce, paper birch, eastern white pine, green ash, red pine	Eastern cottonwood, Siouxland cottonwood
Roliss, depressional----	5	---	---	---	---	---
Hamre-----	2	---	---	---	---	---
B205A:						
Berner-----	80	---	---	---	---	---
Northwood-----	7	---	---	---	---	---

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
E205A:						
Grygla-----	5	Nanking cherry, Peking cotoneaster, common ninebark, redosier dogwood	American cranberrybush, common lilac	Eastern arborvitae, Black Hills spruce, black ash, white spruce	Paper birch, green ash	Silver maple, Siouxland cottonwood
Cathro-----	3	---	---	---	---	---
Hamre-----	3	---	---	---	---	---
Seelyeville-----	2	---	---	---	---	---
E206A:						
Hamre-----	80	---	---	---	---	---
Chilgren-----	8	Nanking cherry, Peking cotoneaster, common ninebark, redosier dogwood	American cranberrybush, common lilac	Eastern arborvitae, black ash, white spruce	Paper birch, green ash, white willow	Silver maple, eastern cottonwood
Northwood-----	5	---	---	---	---	---
Cathro-----	3	---	---	---	---	---
Grygla-----	2	Nanking cherry, Peking cotoneaster, common ninebark, redosier dogwood	American cranberrybush, common lilac	Eastern arborvitae, Black Hills spruce, black ash, white spruce	Paper birch, green ash	Silver maple, Siouxland cottonwood
Roliss-----	2	Redosier dogwood, sargent crabapple	Common chokecherry, common lilac	Eastern arborvitae, Black Hills spruce, bur oak, Russian olive, white spruce	Golden willow, Siberian elm	Imperial Carolina poplar, eastern cottonwood, Siouxland cottonwood
I1A:						
Augsburg-----	75	Russian almond, sandbar willow, indigobush, redosier dogwood	Common chokecherry, common lilac, silver buffaloberry	Black Hills spruce, common hackberry	Laurel willow, green ash, robusta cottonwood	Eastern cottonwood, imperial Carolina poplar
Borup-----	10	Russian almond, sandbar willow, indigobush, redosier dogwood	Common chokecherry, common lilac, silver buffaloberry	Black Hills spruce, black ash	Green ash, laurel willow, robusta cottonwood	Eastern cottonwood, imperial Carolina poplar

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I1A: Foxlake-----	5	Nanking cherry, Russian almond, Saskatoon serviceberry, Siberian peashrub, golden currant, redosier dogwood, silver buffaloberry	Common chokecherry, common lilac, eastern arborvitae	Black Hills spruce, blue spruce, common hackberry, green ash	Laurel willow, Siberian elm	Imperial Carolina poplar, eastern cottonwood
Augsburg, depressional--	3	---	---	---	---	---
Wheatville-----	3	Blueleaf honeysuckle, indigobush, silverberry	Siberian peashrub, common chokecherry, common lilac, silver buffaloberry, eastern arborvitae, eastern redcedar	Black Hills spruce, bur oak, ponderosa pine, common hackberry, green ash	Laurel willow, silver maple	Eastern cottonwood, imperial Carolina poplar
Glyndon-----	2	Blueleaf honeysuckle, indigobush, silverberry	Siberian peashrub, common chokecherry, common lilac, silver buffaloberry, common lilac, eastern arborvitae, eastern redcedar	Black Hills spruce, ponderosa pine, ponderosa pine, bur oak, common hackberry	Common hackberry, green ash, laurel willow, laurel willow, silver maple	Imperial Carolina poplar, eastern cottonwood
Espelie-----	1	Nanking cherry, golden currant, redosier dogwood	Amur maple, Siberian peashrub, common lilac, American plum, Manchurian apricot, common chokecherry	Manchurian crabapple, black ash, blue spruce, common hackberry	Siberian elm, laurel willow	Carolina poplar, eastern cottonwood
Hattie-----	1	American plum, Russian almond, blueleaf honeysuckle, common chokecherry, golden currant	Siberian peashrub, late lilac, Manchurian crabapple	Blue spruce, Black Hills spruce, bur oak	Common hackberry, green ash, American basswood	Siberian elm, eastern cottonwood, imperial Carolina poplar

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I2A: Augsburg-----	75	Russian almond, sandbar willow, blueleaf honeysuckle, indigobush, redosier dogwood	Siberian peashrub, common chokecherry, common lilac, silver buffaloberry	Black Hills spruce, eastern arborvitae	Laurel willow, robusta cottonwood	Eastern cottonwood, imperial Carolina poplar
Borup-----	10	Russian almond, sandbar willow, indigobush, redosier dogwood	Siberian peashrub, common chokecherry, common lilac, silver buffaloberry	Black Hills spruce, common hackberry	Laurel willow, green ash, robusta cottonwood	Eastern cottonwood, imperial Carolina poplar
Foxlake-----	5	Nanking cherry, Russian almond, Saskatoon serviceberry, Siberian peashrub, golden currant, redosier dogwood, silver buffaloberry	Common chokecherry, common lilac, eastern arborvitae	Black Hills spruce, blue spruce, common hackberry, green ash	Laurel willow, Siberian elm	Imperial Carolina poplar, eastern cottonwood
Augsburg, depressional--	3	---	---	---	---	---
Wheatville-----	3	Blueleaf honeysuckle, indigobush, silverberry	Siberian peashrub, common chokecherry, common lilac, silver buffaloberry, eastern arborvitae, eastern redcedar	Black Hills spruce, bur oak, ponderosa pine, common hackberry, green ash	Laurel willow, silver maple	Eastern cottonwood, imperial Carolina poplar
Glyndon-----	2	Blueleaf honeysuckle, indigobush, silverberry	Siberian peashrub, common chokecherry, common lilac, silver buffaloberry, common lilac, eastern arborvitae, eastern redcedar	Black Hills spruce, ponderosa pine, ponderosa pine, bur oak, common hackberry	Common hackberry, green ash, laurel willow, laurel willow, silver maple	Imperial Carolina poplar, eastern cottonwood
Espelie-----	1	Nanking cherry, golden currant, redosier dogwood	Amur maple, Siberian peashrub, common lilac, American plum, Manchurian apricot, common chokecherry	Manchurian crabapple, black ash, blue spruce, common hackberry	Siberian elm, laurel willow	Carolina poplar, eastern cottonwood

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I2A:						
Hattie-----	1	American plum, Russian almond, blueleaf honeysuckle, common chokecherry, golden currant	Siberian peashrub, late lilac, Manchurian crabapple	Blue spruce, Black Hills spruce, bur oak	Common hackberry, green ash, American basswood	Siberian elm, eastern cottonwood, imperial Carolina poplar
I3A:						
Berner-----	80	---	---	---	---	---
Northwood-----	7	---	---	---	---	---
Kratka-----	5	American plum, Nanking cherry, Siberian peashrub, golden currant, redosier dogwood	Amur maple, Peking cotoneaster, common chokecherry, indigobush, nannyberry	Manchurian apricot, Russian olive, blue spruce, Black Hills spruce, common hackberry	Green ash, laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
Hamre-----	3	---	---	---	---	---
Strathcona-----	3	Siberian peashrub, common lilac, redosier dogwood, western sandcherry	Common chokecherry, silver buffaloberry, eastern arborvitae	Black Hills spruce, common hackberry, green ash	Laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
Seelyeville-----	2	---	---	---	---	---
I4A:						
Berner-----	30	---	---	---	---	---
Rosewood, depressional--	30	---	---	---	---	---
Strathcona, depressional	30	---	---	---	---	---
Rosewood-----	4	Siberian peashrub, common lilac, indigobush, redosier dogwood	Common chokecherry, nannyberry, silver buffaloberry, eastern arborvitae	Black Hills spruce, black ash, common hackberry, green ash	Laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
Deerwood-----	2	---	---	---	---	---
Mavie-----	2	Sandbar willow, Siberian peashrub, common lilac, indigobush	Common chokecherry, late lilac, eastern arborvitae, eastern redcedar	Black ash, Black Hills spruce, common hackberry, green ash	Laurel willow, Siberian elm, Siouxland cottonwood	---

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I4A: Strathcona-----	2	Siberian peashrub, common lilac, redosier dogwood, western sandcherry	Common chokecherry, silver buffaloberry, eastern arborvitae	Black Hills spruce, common hackberry, green ash	Laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
I5A: Borup-----	75	Russian almond, sandbar willow, indigobush, redosier dogwood	Common chokecherry, common lilac, silver buffaloberry	Black Hills spruce, black ash	Green ash, laurel willow, robusta cottonwood	Eastern cottonwood, imperial Carolina poplar
Glyndon-----	9	Blueleaf honeysuckle, indigobush, silverberry	Siberian peashrub, common chokecherry, common lilac, silver buffaloberry, common lilac, eastern arborvitae, eastern redcedar	Black Hills spruce, ponderosa pine, ponderosa pine, bur oak, common hackberry	Common hackberry, green ash, laurel willow, laurel willow, silver maple	Imperial Carolina poplar, eastern cottonwood
Rosewood-----	8	Siberian peashrub, common lilac, indigobush, redosier dogwood	Common chokecherry, nannyberry, silver buffaloberry, eastern arborvitae	Black Hills spruce, black ash, common hackberry, green ash	Laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
Augsburg-----	5	Russian almond, sandbar willow, indigobush, redosier dogwood	Common chokecherry, common lilac, silver buffaloberry	Black Hills spruce, common hackberry	Laurel willow, green ash, robusta cottonwood	Eastern cottonwood, imperial Carolina poplar
Augsburg, depressional--	3	---	---	---	---	---
I6A: Borup-----	75	Russian almond, sandbar willow, indigobush, redosier dogwood	Siberian peashrub, common chokecherry, common lilac, silver buffaloberry	Black Hills spruce, common hackberry	Laurel willow, green ash, robusta cottonwood	Eastern cottonwood, imperial Carolina poplar
Glyndon-----	9	Blueleaf honeysuckle, indigobush, silverberry	Siberian peashrub, common chokecherry, common lilac, silver buffaloberry, common lilac, eastern arborvitae, eastern redcedar	Black Hills spruce, ponderosa pine, ponderosa pine, bur oak, common hackberry	Common hackberry, green ash, laurel willow, laurel willow, silver maple	Imperial Carolina poplar, eastern cottonwood

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I6A:						
Rosewood-----	8	Siberian peashrub, common lilac, indigobush, redosier dogwood	Common chokecherry, nannyberry, silver buffaloberry, eastern arborvitae	Black Hills spruce, black ash, common hackberry, green ash	Laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
Augsburg-----	5	Russian almond, sandbar willow, indigobush, redosier dogwood	Common chokecherry, common lilac, silver buffaloberry	Black Hills spruce, common hackberry	Laurel willow, green ash, robusta cottonwood	Eastern cottonwood, imperial Carolina poplar
Augsburg, depressional--	3	---	---	---	---	---
I7A:						
Bowstring-----	45	---	---	---	---	---
Fluvaquents-----	45	---	---	---	---	---
Hapludolls-----	5	Nanking cherry, golden currant, indigobush	American plum, Siberian peashrub, common lilac, eastern redcedar	Siberian crabapple, Russian olive, bur oak, ponderosa pine, blue spruce	Green ash, honeylocust	Siberian elm, eastern cottonwood, imperial Carolina poplar, silver maple
Water-----	5	---	---	---	---	---
I8A:						
Cathro-----	80	---	---	---	---	---
Hamre-----	8	---	---	---	---	---
Northwood-----	3	---	---	---	---	---
Roliss-----	3	Sandbar willow, Siberian peashrub, indigobush, redosier dogwood	Common chokecherry, common lilac, cotoneaster, eastern arborvitae	Black Hills spruce, blue spruce, bur oak, common hackberry, green ash	Laurel willow, Siberian elm	Imperial Carolina poplar, eastern cottonwood
Berner-----	2	---	---	---	---	---
Kratka-----	2	American plum, Nanking cherry, Siberian peashrub, golden currant, redosier dogwood	Amur maple, Peking cotoneaster, common chokecherry, indigobush, nannyberry	Manchurian apricot, Russian olive, blue spruce, Black Hills spruce, common hackberry	Green ash, laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I8A: Seelyeville-----	2	---	---	---	---	---
I9A: Clearwater-----	80	Nanking cherry, Russian almond, Saskatoon serviceberry, Siberian peashrub, golden currant, redosier dogwood, silver buffaloberry	Common chokecherry, common lilac, cotoneaster	Black Hills spruce, blue spruce, common hackberry, green ash	Laurel willow, Siberian elm	Imperial Carolina poplar, eastern cottonwood
Clearwater, very cobbly	5	Nanking cherry, Russian almond, Saskatoon serviceberry, Siberian peashrub, golden currant, redosier dogwood, silver buffaloberry	Common chokecherry, common lilac, cotoneaster	Black Hills spruce, blue spruce, common hackberry, green ash	Laurel willow, Siberian elm	Imperial Carolina poplar, eastern cottonwood
Reis-----	5	Russian almond, Saskatoon serviceberry, Siberian peashrub, redosier dogwood	Siberian peashrub, common chokecherry, common lilac, cotoneaster, common chokecherry	White spruce, Black Hills spruce, Russian olive, blue spruce, common hackberry, green ash	Laurel willow, Siberian elm	Golden willow, imperial Carolina poplar, eastern cottonwood
Clearwater, depressional	3	---	---	---	---	---
Espelie-----	3	Nanking cherry, golden currant, redosier dogwood	Amur maple, Siberian peashrub, common lilac, American plum, Manchurian apricot, common chokecherry	Manchurian crabapple, black ash, blue spruce, common hackberry	Siberian elm, laurel willow	Carolina poplar, eastern cottonwood
Foxlake-----	2	Nanking cherry, Russian almond, Saskatoon serviceberry, Siberian peashrub, golden currant, redosier dogwood, silver buffaloberry	Common chokecherry, common lilac, eastern arborvitae	Black Hills spruce, blue spruce, common hackberry, green ash	Laurel willow, Siberian elm	Imperial Carolina poplar, eastern cottonwood

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I9A: Hattie-----	1	American plum, Russian almond, blueleaf honeysuckle, common chokecherry, golden currant	Siberian peashrub, late lilac, Manchurian crabapple	Blue spruce, Black Hills spruce, bur oak	Common hackberry, green ash, American basswood	Siberian elm, eastern cottonwood, imperial Carolina poplar
Huot-----	1	Indigobush, sargent crabapple, silverberry	Siberian peashrub, common chokecherry, common lilac, eastern arborvitae, eastern redcedar	Ponderosa pine, black ash, bur oak	Common hackberry, green ash	Siberian elm, eastern cottonwood
I10A: Clearwater, depressional	85	---	---	---	---	---
Clearwater-----	9	Nanking cherry, Russian almond, Saskatoon serviceberry, Siberian peashrub, golden currant, redosier dogwood, silver buffaloberry	Common chokecherry, common lilac, cotoneaster	Black Hills spruce, blue spruce, common hackberry, green ash	Laurel willow, Siberian elm	Imperial Carolina poplar, eastern cottonwood
Augsburg, depressional--	3	---	---	---	---	---
Reis-----	2	Russian almond, Saskatoon serviceberry, Siberian peashrub, redosier dogwood	Siberian peashrub, common chokecherry, common lilac, cotoneaster, common chokecherry	White spruce, Black Hills spruce, Russian olive, blue spruce, common hackberry, green ash	Laurel willow, Siberian elm	Golden willow, imperial Carolina poplar, eastern cottonwood
Espelie-----	1	Nanking cherry, golden currant, redosier dogwood	Amur maple, Siberian peashrub, common lilac, American plum, Manchurian apricot, common chokecherry	Manchurian crabapple, black ash, blue spruce, common hackberry	Siberian elm, laurel willow	Carolina poplar, eastern cottonwood

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I11A:						
Deerwood-----	85	---	---	---	---	---
Rosewood-----	6	Siberian peashrub, common lilac, indigobush, redosier dogwood	Common chokecherry, nannyberry, silver buffaloberry, eastern arborvitae	Black Hills spruce, black ash, common hackberry, green ash	Laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
Markey-----	3	---	---	---	---	---
Strathcona-----	2	Siberian peashrub, common lilac, redosier dogwood, western sandcherry	Common chokecherry, silver buffaloberry, eastern arborvitae	Black Hills spruce, common hackberry, green ash	Laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
Syrene-----	2	Siberian peashrub, redosier dogwood, western sandcherry	Common chokecherry, late lilac, eastern arborvitae, nannyberry, silver buffaloberry	Black Hills spruce, common hackberry, green ash	Laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
Venlo-----	2	---	---	---	---	---
I12A:						
Eckvoll-----	70	Peking cotoneaster, Saskatoon serviceberry, silver buffaloberry, western sandcherry	Amur maple, Siberian peashrub, nannyberry, common chokecherry, eastern redcedar	Manchurian crabapple, Black Hills spruce, Scotch pine, Siberian elm, bur oak, common hackberry, green ash	Red maple, green ash, paper birch	Imperial Carolina poplar, Siouxland cottonwood
Kratka-----	8	American plum, Nanking cherry, Siberian peashrub, golden currant, redosier dogwood	Amur maple, Peking cotoneaster, common chokecherry, indigobush, nannyberry	Manchurian apricot, Russian olive, blue spruce, Black Hills spruce, common hackberry	Green ash, laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I12A: Smiley-----	7	Russian almond, golden currant, honeysuckle, indigobush, redosier dogwood	Amur maple, Arnold hawthorn, Siberian peashrub, common lilac, late lilac, American plum, common chokecherry, gray dogwood, nannyberry, silver buffaloberry	Black Hills spruce, Manchurian apricot, Manchurian crabapple, blue spruce	Green ash, quaking aspens, American basswood	Siberian elm, laurel willow, eastern cottonwood, robusta cottonwood
Linveltd-----	5	Nanking cherry, Saskatoon serviceberry, indigobush, silver buffaloberry	Siberian peashrub, common chokecherry, common lilac, American cranberrybush, Amur maple, eastern redcedar	Black Hills spruce, Russian olive, Scotch pine, bur oak, common hackberry	Imperial Carolina poplar, robusta cottonwood	Siberian elm, eastern cottonwood
Reiner-----	5	Russian almond, Saskatoon serviceberry, golden currant, silverberry	American cranberrybush, American plum, common chokecherry, eastern redcedar	Black Hills spruce, Manchurian apricot, blue spruce, bur oak	Laurel willow, American basswood	Siberian elm, sugar maple, eastern cottonwood
Foldahl-----	2	Peking cotoneaster, Saskatoon serviceberry, western sandcherry	Amur maple, Siberian peashrub, silver buffaloberry, common chokecherry, eastern redcedar, late lilac, nannyberry	Black Hills spruce, Scotch pine, red maple	Common hackberry, paper birch, silver maple, green ash	Siouxland cottonwood, imperial Carolina poplar
Pelan-----	2	Peking cotoneaster, redosier dogwood	American plum, common chokecherry, hedge cotoneaster, common lilac, silver buffaloberry	Ponderosa pine, Manchurian crabapple, bur oak, Russian olive	Green ash, Siberian elm	Silver maple, imperial Carolina poplar, eastern cottonwood
Poppleton-----	1	Peking cotoneaster, blueleaf honeysuckle, silver buffaloberry, silverberry, western sandcherry	Rocky Mountain juniper, Siberian peashrub, late lilac, common chokecherry, eastern redcedar	Black Hills spruce, Scotch pine	Red maple, green ash	Siouxland cottonwood, imperial Carolina poplar

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I13A:						
Espelie-----	75	Nanking cherry, golden currant, redosier dogwood	Amur maple, Siberian peashrub, common lilac, American plum, Manchurian apricot, common chokecherry	Manchurian crabapple, black ash, blue spruce, common hackberry	Siberian elm, laurel willow	Carolina poplar, eastern cottonwood
Foxlake-----	8	Nanking cherry, Russian almond, Saskatoon serviceberry, Siberian peashrub, golden currant, redosier dogwood, silver buffaloberry	Common chokecherry, common lilac, eastern arborvitae	Black Hills spruce, blue spruce, common hackberry, green ash	Laurel willow, Siberian elm	Imperial Carolina poplar, eastern cottonwood
Hilaire-----	7	American plum, Peking cotoneaster, Saskatoon serviceberry, western sandcherry	Saskatoon serviceberry, Siberian peashrub, Amur maple, common chokecherry, eastern redcedar, nannyberry	Manchurian crabapple, Black Hills spruce, Scotch pine, bur oak, paper birch	Common hackberry, green ash	Siberian elm, Siouxland cottonwood, imperial Carolina poplar
Clearwater, depressional	5	---	---	---	---	---
Thiefriver-----	5	Siberian peashrub, common lilac, redosier dogwood	Common chokecherry, nannyberry, eastern arborvitae	Black Hills spruce, black ash, green ash	Laurel willow, Siberian elm	Eastern cottonwood, imperial Carolina poplar
I14B:						
Fairdale-----	85	Peking cotoneaster, Russian almond, Saskatoon serviceberry, golden currant	American plum, Siberian peashrub, American cranberrybush, common chokecherry, eastern redcedar	Black Hills spruce, ponderosa pine, bur oak, common hackberry, paper birch	Green ash, laurel willow	American basswood, eastern cottonwood
Fluvaquents-----	6	---	---	---	---	---
Hapludolls-----	5	Nanking cherry, golden currant, indigobush	American plum, Siberian peashrub, common lilac, eastern redcedar	Siberian crabapple, Russian olive, bur oak, ponderosa pine, blue spruce	Green ash, honeylocust	Siberian elm, eastern cottonwood, imperial Carolina poplar, silver maple

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I14B: Hapludalfs-----	2	---	---	---	---	---
Zell-----	2	American plum, Siberian peashrub, common lilac, silver buffaloberry	Rocky Mountain juniper, eastern redcedar, Russian olive, common hackberry	Green ash, ponderosa pine, Siberian elm	---	---
I14D: Fairdale-----	85	Peking cotoneaster, silver buffaloberry, silverberry	American plum, peashrub, common chokecherry, eastern arborvitae, eastern redcedar, ponderosa pine	Black Hills spruce, black ash, paper birch, common hackberry	Green ash, laurel willow, quaking aspen	American basswood, eastern cottonwood
Fluvaquents-----	6	---	---	---	---	---
Hapludolls-----	4	Nanking cherry, golden currant, indigobush	American plum, Siberian peashrub, common lilac, eastern redcedar	Siberian crabapple, Russian olive, bur oak, ponderosa pine, blue spruce	Green ash, honeylocust	Siberian elm, eastern cottonwood, imperial Carolina poplar, silver maple
Zell-----	3	American plum, Siberian peashrub, common lilac, silver buffaloberry	Rocky Mountain juniper, eastern redcedar, Russian olive, common hackberry	Green ash, ponderosa pine, Siberian elm	---	---
Hapludalfs-----	2	---	---	---	---	---
I15A: Flaming-----	70	Peking cotoneaster, blueleaf honeysuckle, silverberry, western sandcherry	Rocky Mountain juniper, nannyberry, peashrub, silver buffaloberry, common chokecherry, eastern redcedar	Black Hills spruce, Scotch pine, ponderosa pine	Red maple, green ash, Siouland cottonwood	---

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I15A: Garborg-----	10	Nanking cherry, Peking cotoneaster, blueleaf honeysuckle, redosier dogwood	American cranberrybush, Rocky Mountain juniper, common lilac, peashrub, common chokecherry, eastern redcedar	Siberian crabapple, blue spruce, Black Hills spruce, Scotch pine, common hackberry	Green ash, laurel willow	Eastern cottonwood, imperial Carolina poplar
Hamar-----	5	Nanking cherry, Siberian peashrub, redosier dogwood, silver buffaloberry	American cranberrybush, common chokecherry, common lilac	Siberian crabapple, Black Hills spruce, blue spruce, black ash, common hackberry	Green ash, laurel willow	Eastern cottonwood, imperial Carolina poplar
Ulen-----	5	Amur honeysuckle, indigobush	Peking cotoneaster, Siberian peashrub, common chokecherry, silver buffaloberry, eastern redcedar	Black Hills spruce, bur oak, ponderosa pine, common hackberry	Green ash, laurel willow	Carolina poplar, Siberian elm, Siouxland cottonwood
Poppleton-----	3	Peking cotoneaster, blueleaf honeysuckle, silver buffaloberry, silverberry, western sandcherry	Rocky Mountain juniper, Siberian peashrub, late lilac, common chokecherry, eastern redcedar	Black Hills spruce, Scotch pine	Red maple, green ash	Siouxland cottonwood, imperial Carolina poplar
Sandberg-----	3	Silver buffaloberry, western sandcherry	Russian olive, common chokecherry, peashrub, late lilac	Eastern redcedar, Scotch pine	Green ash, silver maple, Carolina poplar, Siouxland cottonwood	---
Foldahl-----	2	Peking cotoneaster, Saskatoon serviceberry, western sandcherry	Amur maple, Siberian peashrub, silver buffaloberry, common chokecherry, eastern redcedar, late lilac, nannyberry	Black Hills spruce, Scotch pine, red maple	Common hackberry, paper birch, silver maple, green ash	Siouxland cottonwood, imperial Carolina poplar

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I15A: Radium-----	2	Sandbar willow, common lilac, cotoneaster, silver buffaloberry	Siberian peashrub, common chokecherry, late lilac, nannyberry	Black Hills spruce, Russian olive, eastern arborvitae, eastern redcedar, Scotch pine, common hackberry	Siberian elm, Siouxland cottonwood, green ash, laurel willow	---
I16F: Fluvaquents-----	55	---	---	---	---	---
Hapludolls-----	25	Nanking cherry, golden currant, indigobush	American plum, Siberian peashrub, common lilac, eastern redcedar	Siberian crabapple, Russian olive, bur oak, ponderosa pine, blue spruce	Green ash, honeylocust	Siberian elm, eastern cottonwood, imperial Carolina poplar, silver maple
Hapludalfs-----	7	---	---	---	---	---
Fairdale-----	5	Peking cotoneaster, silver buffaloberry, silverberry	American plum, peashrub, common chokecherry, eastern arborvitae, eastern redcedar, ponderosa pine	Black Hills spruce, black ash, paper birch, common hackberry	Green ash, laurel willow, quaking aspen	American basswood, eastern cottonwood
Water-----	5	---	---	---	---	---
Bowstring-----	2	---	---	---	---	---
Rauville-----	1	---	---	---	---	---
I17A: Foldahl-----	75	Saskatoon serviceberry, blueleaf honeysuckle, indigobush, silverberry, western sandcherry	Amur maple, Peking cotoneaster, Siberian peashrub, nannyberry, silver buffaloberry, common chokecherry, common lilac, eastern arborvitae, eastern redcedar, late lilac, nannyberry	Manchurian crabapple, Black Hills spruce, Scotch pine, bur oak, ponderosa pine, red maple	Paper birch, common hackberry, green ash, silver maple	Imperial Carolina poplar, cottonwood

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I17A: Kratka-----	10	American plum, Nanking cherry, Siberian peashrub, golden currant, redosier dogwood	Amur maple, Peking cotoneaster, common chokecherry, indigobush, nannyberry	Manchurian apricot, Russian olive, blue spruce, Black Hills spruce, common hackberry	Green ash, laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
Roliss-----	5	Sandbar willow, Siberian peashrub, indigobush, redosier dogwood	Common chokecherry, common lilac, cotoneaster, eastern arborvitae	Black Hills spruce, blue spruce, bur oak, common hackberry, green ash	Laurel willow, Siberian elm	Imperial Carolina poplar, eastern cottonwood
Flaming-----	4	Peking cotoneaster, blueleaf honeysuckle, silverberry, western sandcherry	Rocky Mountain juniper, nannyberry, peashrub, silver buffaloberry, common chokecherry, eastern redcedar	Black Hills spruce, Scotch pine, ponderosa pine	Red maple, green ash, Siouxland cottonwood	---
Grimstad-----	2	Blueleaf honeysuckle, indigobush, silverberry	Arnold hawthorn, Siberian peashrub, common chokecherry, late lilac, silver buffaloberry, eastern redcedar	Black Hills spruce, black ash, ponderosa pine, bur oak	Common hackberry, green ash, laurel willow, red maple	Eastern cottonwood, imperial Carolina poplar
Linveldt-----	2	Nanking cherry, Saskatoon serviceberry, indigobush, silver buffaloberry	Siberian peashrub, common chokecherry, common lilac, American cranberrybush, Amur maple, eastern redcedar	Black Hills spruce, Russian olive, Scotch pine, bur oak, common hackberry	Imperial Carolina poplar, robusta cottonwood	Siberian elm, eastern cottonwood
Eckvoll-----	1	Peking cotoneaster, Saskatoon serviceberry, silver buffaloberry, western sandcherry	Amur maple, Siberian peashrub, nannyberry, common chokecherry, eastern redcedar	Manchurian crabapple, Black Hills spruce, Scotch pine, Siberian elm, bur oak, common hackberry, green ash	Red maple, green ash, paper birch	Imperial Carolina poplar, Siouxland cottonwood

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I17A: Strathcona-----	1	Siberian peashrub, common lilac, redosier dogwood, western sandcherry	Common chokecherry, silver buffaloberry, eastern arborvitae	Black Hills spruce, common hackberry, green ash	Laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
I18A: Foldahl-----	75	Peking cotoneaster, Saskatoon serviceberry, western sandcherry	Amur maple, Siberian peashrub, silver buffaloberry, common chokecherry, eastern redcedar, late lilac, nannyberry	Black Hills spruce, Scotch pine, red maple	Common hackberry, paper birch, silver maple, green ash	Siouxland cottonwood, imperial Carolina poplar
Kratka-----	10	American plum, Nanking cherry, Siberian peashrub, golden currant, redosier dogwood	Amur maple, Peking cotoneaster, common chokecherry, indigobush, nannyberry	Manchurian apricot, Russian olive, blue spruce, Black Hills spruce, common hackberry	Green ash, laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
Roliss-----	5	Sandbar willow, Siberian peashrub, indigobush, redosier dogwood	Common chokecherry, common lilac, cotoneaster, eastern arborvitae	Black Hills spruce, blue spruce, bur oak, common hackberry, green ash	Laurel willow, Siberian elm	Imperial Carolina poplar, eastern cottonwood
Flaming-----	4	Peking cotoneaster, blueleaf honeysuckle, silverberry, western sandcherry	Rocky Mountain juniper, nannyberry, peashrub, silver buffaloberry, common chokecherry, eastern redcedar	Black Hills spruce, Scotch pine, ponderosa pine	Red maple, green ash, Siouxland cottonwood	---
Grimstad-----	2	Blueleaf honeysuckle, indigobush, silverberry	Arnold hawthorn, Siberian peashrub, common chokecherry, late lilac, silver buffaloberry, eastern redcedar	Black Hills spruce, black ash, ponderosa pine, bur oak	Common hackberry, green ash, laurel willow, red maple	Eastern cottonwood, imperial Carolina poplar

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I18A: Linveltdt-----	2	Nanking cherry, Saskatoon serviceberry, indigobush, silver buffaloberry	Siberian peashrub, common chokecherry, common lilac, American cranberrybush, Amur maple, eastern redcedar	Black Hills spruce, Russian olive, Scotch pine, bur oak, common hackberry	Imperial Carolina poplar, robusta cottonwood	Siberian elm, eastern cottonwood
Eckvoll-----	1	Peking cotoneaster, Saskatoon serviceberry, silver buffaloberry, western sandcherry	Amur maple, Siberian peashrub, nannyberry, common chokecherry, eastern redcedar	Manchurian crabapple, Black Hills spruce, Scotch pine, Siberian elm, bur oak, common hackberry, green ash	Red maple, green ash, paper birch	Imperial Carolina poplar, Siouland cottonwood
Strathcona-----	1	Siberian peashrub, common lilac, redosier dogwood, western sandcherry	Common chokecherry, silver buffaloberry, eastern arborvitae	Black Hills spruce, common hackberry, green ash	Laurel willow, Siberian elm	Siouland cottonwood, imperial Carolina poplar
I19A: Foxhome-----	65	Blueleaf honeysuckle, eastern redcedar, hedge cotoneaster, peashrub, silver buffaloberry, western sandcherry	Amur maple, common chokecherry, eastern arborvitae, eastern redcedar, nannyberry	Scotch pine, bur oak, ponderosa pine	Siberian elm, eastern cottonwood, green ash	---
Kittson-----	10	Nanking cherry, Saskatoon serviceberry, golden currant, silverberry	American cranberrybush, American plum, Siberian peashrub, eastern arborvitae	Nannyberry, Manchurian apricot, Manchurian crabapple, Black Hills spruce, blue spruce, bur oak	American basswood, green ash, robusta cottonwood	Red maple, eastern cottonwood, imperial Carolina poplar
Strandquist-----	10	Siberian peashrub, common lilac, redosier dogwood, silverberry, western sandcherry	Buffaloberry, common chokecherry, late lilac, eastern arborvitae, eastern redcedar, nannyberry	Black Hills spruce, Russian olive, black ash, common hackberry, green ash	Laurel willow, Siberian elm	Siouland cottonwood, imperial Carolina poplar

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I19A: Foldahl-----	5	Saskatoon serviceberry, blueleaf honeysuckle, indigobush, silverberry, western sandcherry	Amur maple, Peking cotoneaster, Siberian peashrub, nannyberry, silver buffaloberry, common chokecherry, common lilac, eastern arborvitae, eastern redcedar, late lilac, nannyberry	Manchurian crabapple, Black Hills spruce, Scotch pine, bur oak, ponderosa pine, red maple	Paper birch, common hackberry, green ash, silver maple	Imperial Carolina poplar, cottonwood
Grimstad-----	5	Blueleaf honeysuckle, indigobush, silverberry	Arnold hawthorn, Siberian peashrub, common chokecherry, late lilac, silver buffaloberry, eastern redcedar	Black Hills spruce, black ash, ponderosa pine, bur oak	Common hackberry, green ash, laurel willow, red maple	Eastern cottonwood, imperial Carolina poplar
Roliss-----	3	Sandbar willow, Siberian peashrub, indigobush, redosier dogwood	Common chokecherry, common lilac, cotoneaster, eastern arborvitae	Black Hills spruce, blue spruce, bur oak, common hackberry, green ash	Laurel willow, Siberian elm	Imperial Carolina poplar, eastern cottonwood
Mavie-----	2	Sandbar willow, Siberian peashrub, common lilac, indigobush	Common chokecherry, late lilac, eastern arborvitae, eastern redcedar	Black ash, Black Hills spruce, common hackberry, green ash	Laurel willow, Siberian elm, Siouxland cottonwood	---
I20A: Foxlake-----	75	Nanking cherry, Russian almond, Saskatoon serviceberry, Siberian peashrub, golden currant, redosier dogwood, silver buffaloberry	Common chokecherry, common lilac, eastern arborvitae	Black Hills spruce, blue spruce, common hackberry, green ash	Laurel willow, Siberian elm	Imperial Carolina poplar, eastern cottonwood

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I20A: Clearwater-----	5	Nanking cherry, Russian almond, Saskatoon serviceberry, Siberian peashrub, golden currant, redosier dogwood, silver buffaloberry	Common chokecherry, common lilac, cotoneaster	Black Hills spruce, blue spruce, common hackberry, green ash	Laurel willow, Siberian elm	Imperial Carolina poplar, eastern cottonwood
Foxlake, very cobbly----	5	Nanking cherry, Russian almond, Saskatoon serviceberry, Siberian peashrub, golden currant, redosier dogwood, silver buffaloberry	Common chokecherry, common lilac, eastern arborvitae	Black Hills spruce, blue spruce, common hackberry, green ash	Laurel willow, Siberian elm	Imperial Carolina poplar, eastern cottonwood
Augsburg-----	3	Russian almond, sandbar willow, indigobush, redosier dogwood	Common chokecherry, common lilac, silver buffaloberry	Black Hills spruce, common hackberry	Laurel willow, green ash, robusta cottonwood	Eastern cottonwood, imperial Carolina poplar
Clearwater, depressional	3	---	---	---	---	---
Espelie-----	3	Nanking cherry, golden currant, redosier dogwood	Amur maple, Siberian peashrub, common lilac, American plum, Manchurian apricot, common chokecherry	Manchurian crabapple, black ash, blue spruce, common hackberry	Siberian elm, laurel willow	Carolina poplar, eastern cottonwood
Hilaire-----	2	American plum, Peking cotoneaster, Saskatoon serviceberry, western sandcherry	Saskatoon serviceberry, Siberian peashrub, Amur maple, common chokecherry, eastern redcedar, nannyberry	Manchurian crabapple, Black Hills spruce, Scotch pine, bur oak, paper birch	Common hackberry, green ash	Siberian elm, Siouxland cottonwood, imperial Carolina poplar
Reis-----	2	Russian almond, Saskatoon serviceberry, Siberian peashrub, redosier dogwood	Siberian peashrub, common chokecherry, common lilac, cotoneaster, common chokecherry	White spruce, Black Hills spruce, Russian olive, blue spruce, common hackberry, green ash	Laurel willow, Siberian elm	Golden willow, imperial Carolina poplar, eastern cottonwood

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I20A: Wheatville-----	2	Blueleaf honeysuckle, indigobush, silverberry	Siberian peashrub, common chokecherry, common lilac, silver buffaloberry, eastern arborvitae, eastern redcedar	Black Hills spruce, bur oak, ponderosa pine, common hackberry, green ash	Laurel willow, silver maple	Eastern cottonwood, imperial Carolina poplar
I21A: Fram-----	85	Nanking cherry, Russian almond, Saskatoon serviceberry, blueleaf honeysuckle, indigobush, silverberry	American plum, Arnold hawthorn, common lilac, silver buffaloberry, eastern redcedar	Siberian crabapple, Black Hills spruce, blue spruce, bur oak, common hackberry, ponderosa pine	Green ash, laurel willow	Eastern cottonwood, imperial Carolina poplar
Hedman-----	12	Siberian peashrub, common lilac, redosier dogwood	Common chokecherry	Eastern redcedar, Russian olive, blue spruce, white spruce	Golden willow, green ash, Siberian elm	Eastern cottonwood
Strathcona-----	2	Siberian peashrub, common lilac, redosier dogwood, western sandcherry	Common chokecherry, silver buffaloberry, eastern arborvitae	Black Hills spruce, common hackberry, green ash	Laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
Foxhome-----	1	Blueleaf honeysuckle, eastern redcedar, hedge cotoneaster, peashrub, silver buffaloberry, western sandcherry	Amur maple, common chokecherry, eastern arborvitae, eastern redcedar, nannyberry	Scotch pine, bur oak, ponderosa pine	Siberian elm, eastern cottonwood, green ash	---
I22A: Glyndon-----	75	Blueleaf honeysuckle, indigobush, silverberry	Siberian peashrub, common chokecherry, silver buffaloberry, common lilac, eastern arborvitae, eastern redcedar	Black Hills spruce, ponderosa pine, bur oak	Common hackberry, green ash, laurel willow, silver maple	Carolina poplar, cottonwood

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I22A: Borup-----	10	Russian almond, sandbar willow, indigobush, redosier dogwood	Common chokecherry, common lilac, silver buffaloberry	Black Hills spruce, black ash	Green ash, laurel willow, robusta cottonwood	Eastern cottonwood, imperial Carolina poplar
Augsburg-----	5	Russian almond, sandbar willow, indigobush, redosier dogwood	Common chokecherry, common lilac, silver buffaloberry	Black Hills spruce, common hackberry	Laurel willow, green ash, robusta cottonwood	Eastern cottonwood, imperial Carolina poplar
Ulen-----	5	Amur honeysuckle, indigobush	Peking cotoneaster, Siberian peashrub, common chokecherry, silver buffaloberry, eastern redcedar	Black Hills spruce, bur oak, ponderosa pine, common hackberry	Green ash, laurel willow	Carolina poplar, Siberian elm, Siouxland cottonwood
Wheatville-----	3	Blueleaf honeysuckle, indigobush, silverberry	Siberian peashrub, common chokecherry, common lilac, silver buffaloberry, eastern arborvitae, eastern redcedar	Black Hills spruce, bur oak, ponderosa pine, common hackberry, green ash	Laurel willow, silver maple	Eastern cottonwood, imperial Carolina poplar
Flaming-----	2	Peking cotoneaster, blueleaf honeysuckle, silverberry, western sandcherry	Rocky Mountain juniper, nannyberry, peashrub, silver buffaloberry, common chokecherry, eastern redcedar	Black Hills spruce, Scotch pine, ponderosa pine	Red maple, green ash, Siouxland cottonwood	---
I23A: Glyndon-----	75	Blueleaf honeysuckle, indigobush, silverberry	Siberian peashrub, common chokecherry, common lilac, silver buffaloberry, common lilac, eastern arborvitae, eastern redcedar	Black Hills spruce, ponderosa pine, ponderosa pine, bur oak, common hackberry	Common hackberry, green ash, laurel willow, laurel willow, silver maple	Imperial Carolina poplar, eastern cottonwood

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I23A: Borup-----	10	Russian almond, sandbar willow, indigobush, redosier dogwood	Siberian peashrub, common chokecherry, common lilac, silver buffaloberry	Black Hills spruce, common hackberry	Laurel willow, green ash, robusta cottonwood	Eastern cottonwood, imperial Carolina poplar
Augsburg-----	5	Russian almond, sandbar willow, indigobush, redosier dogwood	Common chokecherry, common lilac, silver buffaloberry	Black Hills spruce, common hackberry	Laurel willow, green ash, robusta cottonwood	Eastern cottonwood, imperial Carolina poplar
Ulen-----	5	Amur honeysuckle, indigobush, silver buffaloberry	Peking cotoneaster, Siberian peashrub, common chokecherry, silver buffaloberry, eastern arborvitae, eastern redcedar	Black Hills spruce, bur oak, ponderosa pine, bur oak, common hackberry	Laurel willow, green ash	Siberian elm, Siouxland cottonwood
Wheatville-----	3	Blueleaf honeysuckle, indigobush, silverberry	Siberian peashrub, common chokecherry, common lilac, silver buffaloberry, eastern arborvitae, eastern redcedar	Black Hills spruce, bur oak, ponderosa pine, common hackberry, green ash	Laurel willow, silver maple	Eastern cottonwood, imperial Carolina poplar
Flaming-----	2	Peking cotoneaster, blueleaf honeysuckle, silverberry, western sandcherry	Rocky Mountain juniper, nannyberry, peashrub, silver buffaloberry, common chokecherry, eastern redcedar	Black Hills spruce, Scotch pine, ponderosa pine	Red maple, green ash, Siouxland cottonwood	---
I24A: Grimstad-----	70	Blueleaf honeysuckle, indigobush, silverberry	Arnold hawthorn, Siberian peashrub, common chokecherry, late lilac, silver buffaloberry, eastern redcedar	Black Hills spruce, black ash, ponderosa pine, bur oak	Common hackberry, green ash, laurel willow, red maple	Eastern cottonwood, imperial Carolina poplar

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I24A: Strathcona-----	12	Siberian peashrub, common lilac, redosier dogwood, western sandcherry	Common chokecherry, silver buffaloberry, eastern arborvitae	Black Hills spruce, common hackberry, green ash	Laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
Foldahl-----	5	Saskatoon serviceberry, blueleaf honeysuckle, indigobush, silverberry, western sandcherry	Amur maple, Peking cotoneaster, Siberian peashrub, nannyberry, silver buffaloberry, common chokecherry, common lilac, eastern arborvitae, eastern redcedar, late lilac, nannyberry	Manchurian crabapple, Black Hills spruce, Scotch pine, bur oak, ponderosa pine, red maple	Paper birch, common hackberry, green ash, silver maple	Imperial Carolina poplar, cottonwood
Hamerly-----	5	Russian almond, Saskatoon serviceberry, blueleaf honeysuckle, indigobush	Arnold hawthorn, Siberian peashrub, common lilac, silver buffaloberry, eastern redcedar	Blue spruce, bur oak, ponderosa pine	Common hackberry, green ash, laurel willow	Siberian elm, eastern cottonwood
Foxhome-----	2	Blueleaf honeysuckle, eastern redcedar, hedge cotoneaster, peashrub, silver buffaloberry, western sandcherry	Amur maple, common chokecherry, eastern arborvitae, eastern redcedar, nannyberry	Scotch pine, bur oak, ponderosa pine	Siberian elm, eastern cottonwood, green ash	---
Karlsruhe-----	2	Common lilac, silver buffaloberry, silverberry	Peashrub, common chokecherry, eastern arborvitae, eastern redcedar	Black Hills spruce, ponderosa pine, Siberian elm, green ash	Laurel willow, silver maple	Siouxland cottonwood, imperial Carolina poplar
Mavie-----	2	Sandbar willow, Siberian peashrub, common lilac, indigobush	Common chokecherry, late lilac, eastern arborvitae, eastern redcedar	Black ash, Black Hills spruce, common hackberry, green ash	Laurel willow, Siberian elm, Siouxland cottonwood	---

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I24A: Ulen-----	2	Amur honeysuckle, indigobush	Peking cotoneaster, Siberian peashrub, common chokecherry, silver buffaloberry, eastern redcedar	Black Hills spruce, bur oak, ponderosa pine, common hackberry	Green ash, laurel willow	Carolina poplar, Siberian elm, Siouxland cottonwood
I25A: Hamar-----	75	Nanking cherry, Siberian peashrub, redosier dogwood, silver buffaloberry	American cranberrybush, common chokecherry, common lilac	Siberian crabapple, Black Hills spruce, blue spruce, black ash, common hackberry	Green ash, laurel willow	Eastern cottonwood, imperial Carolina poplar
Garborg-----	10	Nanking cherry, Peking cotoneaster, blueleaf honeysuckle, redosier dogwood	American cranberrybush, Rocky Mountain juniper, common lilac, peashrub, common chokecherry, eastern redcedar	Siberian crabapple, blue spruce, Black Hills spruce, Scotch pine, common hackberry	Green ash, laurel willow	Eastern cottonwood, imperial Carolina poplar
Rosewood-----	7	Siberian peashrub, common lilac, indigobush, redosier dogwood	Common chokecherry, nannyberry, silver buffaloberry, eastern arborvitae	Black Hills spruce, black ash, common hackberry, green ash	Laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
Venlo-----	3	---	---	---	---	---
Flaming-----	2	Peking cotoneaster, blueleaf honeysuckle, silverberry, western sandcherry	Rocky Mountain juniper, nannyberry, peashrub, silver buffaloberry, common chokecherry, eastern redcedar	Black Hills spruce, Scotch pine, ponderosa pine	Red maple, green ash, Siouxland cottonwood	---
Hangaard-----	2	Peking cotoneaster, sandbar willow, Siberian peashrub, redosier dogwood, western sandcherry	Amur maple, common chokecherry	Black Hills spruce, Scotch pine, black ash, common hackberry	Green ash, laurel willow, silver maple	Siberian elm, Siouxland cottonwood, imperial Carolina poplar

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I25A: Kratka-----	1	American plum, Nanking cherry, Siberian peashrub, golden currant, redosier dogwood	Amur maple, Peking cotoneaster, common chokecherry, indigobush, nannyberry	Manchurian apricot, Russian olive, blue spruce, Black Hills spruce, common hackberry	Green ash, laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
I26A: Hamerly-----	75	Russian almond, Saskatoon serviceberry, blueleaf honeysuckle, indigobush	Arnold hawthorn, Siberian peashrub, common lilac, silver buffaloberry, eastern redcedar	Blue spruce, bur oak, ponderosa pine	Common hackberry, green ash, laurel willow	Siberian elm, eastern cottonwood
Vallers-----	12	Russian almond, sandbar willow, Siberian peashrub, indigobush	Common chokecherry, common lilac, eastern redcedar	Black Hills spruce, blue spruce, green ash, common hackberry	Laurel willow, quaking aspen	Imperial Carolina poplar, eastern cottonwood
Foxhome-----	3	Blueleaf honeysuckle, eastern redcedar, hedge cotoneaster, peashrub, silver buffaloberry, western sandcherry	Amur maple, common chokecherry, eastern arborvitae, eastern redcedar, nannyberry	Scotch pine, bur oak, ponderosa pine	Siberian elm, eastern cottonwood, green ash	---
Grimstad-----	3	Blueleaf honeysuckle, indigobush, silverberry	Arnold hawthorn, Siberian peashrub, common chokecherry, late lilac, silver buffaloberry, eastern redcedar	Black Hills spruce, black ash, ponderosa pine, bur oak	Common hackberry, green ash, laurel willow, red maple	Eastern cottonwood, imperial Carolina poplar
Hamerly, very cobbly----	3	Russian almond, Saskatoon serviceberry, blueleaf honeysuckle, indigobush	Arnold hawthorn, Siberian peashrub, common lilac, silver buffaloberry, eastern redcedar	Blue spruce, bur oak, ponderosa pine	Common hackberry, green ash, laurel willow	Siberian elm, eastern cottonwood
Strathcona-----	3	Siberian peashrub, common lilac, redosier dogwood, western sandcherry	Common chokecherry, silver buffaloberry, eastern arborvitae	Black Hills spruce, common hackberry, green ash	Laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I26A: Roliss, depressional----	1	---	---	---	---	---
I27A: Hamre-----	80	---	---	---	---	---
Northwood-----	5	---	---	---	---	---
Roliss-----	5	Sandbar willow, Siberian peashrub, indigobush, redosier dogwood	Common chokecherry, common lilac, cotoneaster, eastern arborvitae	Black Hills spruce, blue spruce, bur oak, common hackberry, green ash	Laurel willow, Siberian elm	Imperial Carolina poplar, eastern cottonwood
Smiley-----	5	Russian almond, golden currant, honeysuckle, indigobush, redosier dogwood	Amur maple, Arnold hawthorn, Siberian peashrub, common lilac, late lilac, American plum, common chokecherry, gray dogwood, nannyberry, silver buffaloberry	Black Hills spruce, Manchurian apricot, Manchurian crabapple, blue spruce	Green ash, quaking aspens, American basswood	Siberian elm, laurel willow, eastern cottonwood, robusta cottonwood
Cathro-----	3	---	---	---	---	---
Kratka-----	2	American plum, Nanking cherry, Siberian peashrub, golden currant, redosier dogwood	Amur maple, Peking cotoneaster, common chokecherry, indigobush, nannyberry	Manchurian apricot, Russian olive, blue spruce, Black Hills spruce, common hackberry	Green ash, laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
I28A: Hangaard-----	75	Peking cotoneaster, sandbar willow, Siberian peashrub, redosier dogwood, western sandcherry	Amur maple, common chokecherry	Black Hills spruce, Scotch pine, black ash, common hackberry	Green ash, laurel willow, silver maple	Siberian elm, Siouxland cottonwood, imperial Carolina poplar
Hamar-----	7	Nanking cherry, Siberian peashrub, redosier dogwood, silver buffaloberry	American cranberrybush, common chokecherry, common lilac	Siberian crabapple, Black Hills spruce, blue spruce, black ash, common hackberry	Green ash, laurel willow	Eastern cottonwood, imperial Carolina poplar

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I28A: Syrene-----	7	Siberian peashrub, redosier dogwood, western sandcherry	Common chokecherry, late lilac, eastern arborvitae, nannyberry, silver buffaloberry	Black Hills spruce, common hackberry, green ash	Laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
Karlsruhe-----	3	Common lilac, silver buffaloberry, silverberry	Peashrub, common chokecherry, eastern arborvitae, eastern redcedar	Black Hills spruce, ponderosa pine, Siberian elm, green ash	Laurel willow, silver maple	Siouxland cottonwood, imperial Carolina poplar
Rosewood-----	3	Siberian peashrub, common lilac, indigobush, redosier dogwood	Common chokecherry, nannyberry, silver buffaloberry, eastern arborvitae	Black Hills spruce, black ash, common hackberry, green ash	Laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
Strandquist-----	3	Siberian peashrub, common lilac, redosier dogwood, silverberry, western sandcherry	Buffaloberry, common chokecherry, late lilac, eastern arborvitae, eastern redcedar, nannyberry	Black Hills spruce, Russian olive, black ash, common hackberry, green ash	Laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
Deerwood-----	2	---	---	---	---	---
I29A: Hattie-----	75	American plum, Russian almond, blueleaf honeysuckle, common chokecherry, golden currant	Siberian peashrub, late lilac, Manchurian crabapple	Blue spruce, Black Hills spruce, bur oak	Common hackberry, green ash, American basswood	Siberian elm, eastern cottonwood, imperial Carolina poplar
Clearwater-----	12	Nanking cherry, Russian almond, Saskatoon serviceberry, Siberian peashrub, golden currant, redosier dogwood, silver buffaloberry	Common chokecherry, common lilac, cotoneaster	Black Hills spruce, blue spruce, common hackberry, green ash	Laurel willow, Siberian elm	Imperial Carolina poplar, eastern cottonwood

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I29A: Reis-----	6	Russian almond, Saskatoon serviceberry, Siberian peashrub, redosier dogwood	Siberian peashrub, common chokecherry, common lilac, cotoneaster, common chokecherry	White spruce, Black Hills spruce, Russian olive, blue spruce, common hackberry, green ash	Laurel willow, Siberian elm	Golden willow, imperial Carolina poplar, eastern cottonwood
Hattie, very cobbly----	5	American plum, Russian almond, blueleaf honeysuckle, common chokecherry, golden currant	Siberian peashrub, late lilac, Manchurian crabapple	Blue spruce, Black Hills spruce, bur oak	Common hackberry, green ash, American basswood	Siberian elm, eastern cottonwood, imperial Carolina poplar
Hilaire-----	2	American plum, Peking cotoneaster, Saskatoon serviceberry, western sandcherry	Saskatoon serviceberry, Siberian peashrub, Amur maple, common chokecherry, eastern redcedar, nannyberry	Manchurian crabapple, Black Hills spruce, Scotch pine, bur oak, paper birch	Common hackberry, green ash	Siberian elm, Siouxland cottonwood, imperial Carolina poplar
I29D: Hattie-----	85	American plum, blueleaf honeysuckle, common chokecherry, golden currant	Siberian peashrub, late lilac	Black Hills spruce, blue spruce, bur oak, common hackberry	Common hackberry, green ash, American basswood	Eastern cottonwood, imperial Carolina poplar
Clearwater-----	6	Nanking cherry, Russian almond, Saskatoon serviceberry, Siberian peashrub, golden currant, redosier dogwood, silver buffaloberry	Common chokecherry, common lilac, cotoneaster	Black Hills spruce, blue spruce, common hackberry, green ash	Laurel willow, Siberian elm	Imperial Carolina poplar, eastern cottonwood
Hattie, level-----	5	American plum, Russian almond, blueleaf honeysuckle, common chokecherry, golden currant	Siberian peashrub, late lilac, Manchurian crabapple	Blue spruce, Black Hills spruce, bur oak	Common hackberry, green ash, American basswood	Siberian elm, eastern cottonwood, imperial Carolina poplar
Boyerlake-----	4	---	---	---	---	---

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I30A: Hedman-----	85	Siberian peashrub, common lilac, redosier dogwood	Common chokecherry	Eastern redcedar, Russian olive, blue spruce, white spruce	Golden willow, green ash, Siberian elm	Eastern cottonwood
Fram-----	5	Nanking cherry, Russian almond, Saskatoon serviceberry, blueleaf honeysuckle, indigobush, silverberry	American plum, Arnold hawthorn, common lilac, silver buffaloberry, eastern redcedar	Siberian crabapple, Black Hills spruce, blue spruce, bur oak, common hackberry, ponderosa pine	Green ash, laurel willow	Eastern cottonwood, imperial Carolina poplar
Strathcona-----	5	Siberian peashrub, common lilac, redosier dogwood, western sandcherry	Common chokecherry, silver buffaloberry, eastern arborvitae	Black Hills spruce, common hackberry, green ash	Laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
Haug-----	3	---	---	---	---	---
Strandquist-----	2	Siberian peashrub, common lilac, redosier dogwood, silverberry, western sandcherry	Buffaloberry, common chokecherry, late lilac, eastern arborvitae, eastern redcedar, nannyberry	Black Hills spruce, Russian olive, black ash, common hackberry, green ash	Laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
I31A: Hedman-----	50	Siberian peashrub, common lilac, redosier dogwood	Common chokecherry	Eastern redcedar, Russian olive, blue spruce, white spruce	Golden willow, green ash, Siberian elm	Eastern cottonwood
Fram-----	40	Nanking cherry, Russian almond, Saskatoon serviceberry, blueleaf honeysuckle, indigobush, silverberry	American plum, Arnold hawthorn, common lilac, silver buffaloberry, eastern redcedar	Siberian crabapple, Black Hills spruce, blue spruce, bur oak, common hackberry, ponderosa pine	Green ash, laurel willow	Eastern cottonwood, imperial Carolina poplar

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I31A: Strathcona-----	5	Siberian peashrub, common lilac, redosier dogwood, western sandcherry	Common chokecherry, silver buffaloberry, eastern arborvitae	Black Hills spruce, common hackberry, green ash	Laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
Haug-----	3	---	---	---	---	---
Strandquist-----	2	Siberian peashrub, common lilac, redosier dogwood, silverberry, western sandcherry	Buffaloberry, common chokecherry, late lilac, eastern arborvitae, eastern redcedar, nannyberry	Black Hills spruce, Russian olive, black ash, common hackberry, green ash	Laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
I32A: Hilaire-----	75	American plum, Peking cotoneaster, Saskatoon serviceberry, western sandcherry	Saskatoon serviceberry, Siberian peashrub, Amur maple, common chokecherry, eastern redcedar, nannyberry	Manchurian crabapple, Black Hills spruce, Scotch pine, bur oak, paper birch	Common hackberry, green ash	Siberian elm, Siouxland cottonwood, imperial Carolina poplar
Espelie-----	12	Nanking cherry, golden currant, redosier dogwood	Amur maple, Siberian peashrub, common lilac, American plum, Manchurian apricot, common chokecherry	Manchurian crabapple, black ash, blue spruce, common hackberry	Siberian elm, laurel willow	Carolina poplar, eastern cottonwood
Huot-----	5	Indigobush, sargent crabapple, silverberry	Siberian peashrub, common chokecherry, common lilac, eastern arborvitae, eastern redcedar	Ponderosa pine, black ash, bur oak	Common hackberry, green ash	Siberian elm, eastern cottonwood
Flaming-----	2	Peking cotoneaster, blueleaf honeysuckle, silverberry, western sandcherry	Rocky Mountain juniper, nannyberry, peashrub, silver buffaloberry, common chokecherry, eastern redcedar	Black Hills spruce, Scotch pine, ponderosa pine	Red maple, green ash, Siouxland cottonwood	---

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I32A: Foxlake-----	2	Nanking cherry, Russian almond, Saskatoon serviceberry, Siberian peashrub, golden currant, redosier dogwood, silver buffaloberry	Common chokecherry, common lilac, eastern arborvitae	Black Hills spruce, blue spruce, common hackberry, green ash	Laurel willow, Siberian elm	Imperial Carolina poplar, eastern cottonwood
Wheatville-----	2	Blueleaf honeysuckle, indigobush, silverberry	Siberian peashrub, common chokecherry, common lilac, silver buffaloberry, eastern arborvitae, eastern redcedar	Black Hills spruce, bur oak, ponderosa pine, common hackberry, green ash	Laurel willow, silver maple	Eastern cottonwood, imperial Carolina poplar
Thiefriever-----	1	Siberian peashrub, common lilac, redosier dogwood	Common chokecherry, nannyberry, eastern arborvitae	Black Hills spruce, black ash, green ash	Laurel willow, Siberian elm	Eastern cottonwood, imperial Carolina poplar
Wyandotte-----	1	Siberian peashrub, silverberry, western sandcherry	Common chokecherry, common lilac, silver buffaloberry, eastern redcedar	Black Hills spruce, eastern arborvitae, ponderosa pine	Laurel willow, Siberian elm, eastern cottonwood	---
I33A: Hilaire-----	75	American plum, Peking cotoneaster, Saskatoon serviceberry, western sandcherry	Saskatoon serviceberry, Siberian peashrub, Amur maple, common chokecherry, eastern redcedar, nannyberry	Manchurian crabapple, Black Hills spruce, Scotch pine, bur oak, paper birch	Common hackberry, green ash	Siberian elm, Siouxland cottonwood, imperial Carolina poplar
Espelie-----	12	Nanking cherry, golden currant, redosier dogwood	Amur maple, Siberian peashrub, common lilac, American plum, Manchurian apricot, common chokecherry	Manchurian crabapple, black ash, blue spruce, common hackberry	Siberian elm, laurel willow	Carolina poplar, eastern cottonwood

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I33A: Huot-----	5	Indigobush, sargent crabapple, silverberry	Siberian peashrub, common chokecherry, common lilac, eastern arborvitae, eastern redcedar	Ponderosa pine, black ash, bur oak	Common hackberry, green ash	Siberian elm, eastern cottonwood
Flaming-----	2	Peking cotoneaster, blueleaf honeysuckle, silverberry, western sandcherry	Rocky Mountain juniper, nannyberry, peashrub, silver buffaloberry, common chokecherry, eastern redcedar	Black Hills spruce, Scotch pine, ponderosa pine	Red maple, green ash, Siouxland cottonwood	---
Foxlake-----	2	Nanking cherry, Russian almond, Saskatoon serviceberry, Siberian peashrub, golden currant, redosier dogwood, silver buffaloberry	Common chokecherry, common lilac, eastern arborvitae	Black Hills spruce, blue spruce, common hackberry, green ash	Laurel willow, Siberian elm	Imperial Carolina poplar, eastern cottonwood
Wheatville-----	2	Blueleaf honeysuckle, indigobush, silverberry	Siberian peashrub, common chokecherry, common lilac, silver buffaloberry, eastern arborvitae, eastern redcedar	Black Hills spruce, bur oak, ponderosa pine, common hackberry, green ash	Laurel willow, silver maple	Eastern cottonwood, imperial Carolina poplar
Thiefriver-----	1	Siberian peashrub, common lilac, redosier dogwood	Common chokecherry, nannyberry, eastern arborvitae	Black Hills spruce, black ash, green ash	Laurel willow, Siberian elm	Eastern cottonwood, imperial Carolina poplar
Wyandotte-----	1	Siberian peashrub, silverberry, western sandcherry	Common chokecherry, common lilac, silver buffaloberry, eastern redcedar	Black Hills spruce, eastern arborvitae, ponderosa pine	Laurel willow, Siberian elm, eastern cottonwood	---

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I34A: Huot-----	75	Indigobush, sargent crabapple, silverberry	Siberian peashrub, common chokecherry, common lilac, eastern arborvitae, eastern redcedar	Ponderosa pine, black ash, bur oak	Common hackberry, green ash	Siberian elm, eastern cottonwood
Thiefriver-----	12	Siberian peashrub, common lilac, redosier dogwood	Common chokecherry, nannyberry, eastern arborvitae	Black Hills spruce, black ash, green ash	Laurel willow, Siberian elm	Eastern cottonwood, imperial Carolina poplar
Hilaire-----	5	American plum, Peking cotoneaster, Saskatoon serviceberry, western sandcherry	Saskatoon serviceberry, Siberian peashrub, Amur maple, common chokecherry, eastern redcedar, nannyberry	Manchurian crabapple, Black Hills spruce, Scotch pine, bur oak, paper birch	Common hackberry, green ash	Siberian elm, Siouxland cottonwood, imperial Carolina poplar
Flaming-----	3	Peking cotoneaster, blueleaf honeysuckle, silverberry, western sandcherry	Rocky Mountain juniper, nannyberry, peashrub, silver buffaloberry, common chokecherry, eastern redcedar	Black Hills spruce, Scotch pine, ponderosa pine	Red maple, green ash, Siouxland cottonwood	---
Foxlake-----	3	Nanking cherry, Russian almond, Saskatoon serviceberry, Siberian peashrub, golden currant, redosier dogwood, silver buffaloberry	Common chokecherry, common lilac, eastern arborvitae	Black Hills spruce, blue spruce, common hackberry, green ash	Laurel willow, Siberian elm	Imperial Carolina poplar, eastern cottonwood
Ulen-----	2	Amur honeysuckle, indigobush	Peking cotoneaster, Siberian peashrub, common chokecherry, silver buffaloberry, eastern redcedar	Black Hills spruce, bur oak, ponderosa pine, common hackberry	Green ash, laurel willow	Carolina poplar, Siberian elm, Siouxland cottonwood

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I35A: Karlsruhe-----	70	Common lilac, silver buffaloberry, silverberry	Peashrub, common chokecherry, eastern arborvitae, eastern redcedar	Black Hills spruce, ponderosa pine, Siberian elm, green ash	Laurel willow, silver maple	Siouxland cottonwood, imperial Carolina poplar
Syrene-----	10	Siberian peashrub, redosier dogwood, western sandcherry	Common chokecherry, late lilac, eastern arborvitae, nannyberry, silver buffaloberry	Black Hills spruce, common hackberry, green ash	Laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
Ulen-----	10	Amur honeysuckle, indigobush, silver buffaloberry	Peking cotoneaster, Siberian peashrub, common chokecherry, silver buffaloberry, eastern arborvitae, eastern redcedar	Black Hills spruce, bur oak, ponderosa pine, bur oak, common hackberry	Laurel willow, green ash	Siberian elm, Siouxland cottonwood
Radium-----	5	Sandbar willow, common lilac, cotoneaster, silver buffaloberry	Siberian peashrub, common chokecherry, late lilac, nannyberry	Black Hills spruce, Russian olive, eastern arborvitae, eastern redcedar, Scotch pine, common hackberry	Siberian elm, Siouxland cottonwood, green ash, laurel willow	---
Rosewood-----	3	Siberian peashrub, common lilac, indigobush, redosier dogwood	Common chokecherry, nannyberry, silver buffaloberry, eastern arborvitae	Black Hills spruce, black ash, common hackberry, green ash	Laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
Sandberg-----	2	Silver buffaloberry, western sandcherry	Russian olive, common chokecherry, peashrub, late lilac	Eastern redcedar, Scotch pine	Green ash, silver maple, Carolina poplar, Siouxland cottonwood	---
I36A: Kittson-----	70	Nanking cherry, Saskatoon serviceberry, golden currant, silverberry	American cranberrybush, American plum, Siberian peashrub, eastern arborvitae	Nannyberry, Manchurian apricot, Manchurian crabapple, Black Hills spruce, blue spruce, bur oak	American basswood, green ash, robusta cottonwood	Red maple, eastern cottonwood, imperial Carolina poplar

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I36A: Roliss-----	12	Sandbar willow, Siberian peashrub, indigobush, redosier dogwood	Common chokecherry, common lilac, cotoneaster, eastern arborvitae	Black Hills spruce, blue spruce, bur oak, common hackberry, green ash	Laurel willow, Siberian elm	Imperial Carolina poplar, eastern cottonwood
Hamerly-----	5	Russian almond, Saskatoon serviceberry, blueleaf honeysuckle, indigobush	Arnold hawthorn, Siberian peashrub, common lilac, silver buffaloberry, eastern redcedar	Blue spruce, bur oak, ponderosa pine	Common hackberry, green ash, laurel willow	Siberian elm, eastern cottonwood
Kratka-----	5	American plum, Nanking cherry, Siberian peashrub, golden currant, redosier dogwood	Amur maple, Peking cotoneaster, common chokecherry, indigobush, nannyberry	Manchurian apricot, Russian olive, blue spruce, Black Hills spruce, common hackberry	Green ash, laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
Grimstad-----	3	Blueleaf honeysuckle, indigobush, silverberry	Arnold hawthorn, Siberian peashrub, common chokecherry, late lilac, silver buffaloberry, eastern redcedar	Black Hills spruce, black ash, ponderosa pine, bur oak	Common hackberry, green ash, laurel willow, red maple	Eastern cottonwood, imperial Carolina poplar
Strandquist-----	3	Siberian peashrub, common lilac, redosier dogwood, silverberry, western sandcherry	Buffaloberry, common chokecherry, late lilac, eastern arborvitae, eastern redcedar, nannyberry	Black Hills spruce, Russian olive, black ash, common hackberry, green ash	Laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
Foxhome-----	2	Blueleaf honeysuckle, eastern redcedar, hedge cotoneaster, peashrub, silver buffaloberry, western sandcherry	Amur maple, common chokecherry, eastern arborvitae, eastern redcedar, nannyberry	Scotch pine, bur oak, ponderosa pine	Siberian elm, eastern cottonwood, green ash	---
I37A: Kratka, depressional----	45	---	---	---	---	---
Strathcona, depressional	45	---	---	---	---	---

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I37A: Northwood-----	5	---	---	---	---	---
Kratka-----	2	American plum, Nanking cherry, Siberian peashrub, golden currant, redosier dogwood	Amur maple, Peking cotoneaster, common chokecherry, indigobush, nannyberry	Manchurian apricot, Russian olive, blue spruce, Black Hills spruce, common hackberry	Green ash, laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
Strathcona-----	2	Siberian peashrub, common lilac, redosier dogwood, western sandcherry	Common chokecherry, silver buffaloberry, eastern arborvitae	Black Hills spruce, common hackberry, green ash	Laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
Roliss-----	1	Sandbar willow, Siberian peashrub, indigobush, redosier dogwood	Common chokecherry, common lilac, cotoneaster, eastern arborvitae	Black Hills spruce, blue spruce, bur oak, common hackberry, green ash	Laurel willow, Siberian elm	Imperial Carolina poplar, eastern cottonwood
I38A: Kratka-----	70	American plum, Nanking cherry, Siberian peashrub, golden currant, redosier dogwood	Amur maple, Peking cotoneaster, common chokecherry, indigobush, nannyberry	Manchurian apricot, Russian olive, blue spruce, Black Hills spruce, common hackberry	Green ash, laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
Smiley-----	7	Russian almond, golden currant, honeysuckle, indigobush, redosier dogwood	Amur maple, Arnold hawthorn, Siberian peashrub, common lilac, late lilac, American plum, common chokecherry, gray dogwood, nannyberry, silver buffaloberry	Black Hills spruce, Manchurian apricot, Manchurian crabapple, blue spruce	Green ash, quaking aspens, American basswood	Siberian elm, laurel willow, eastern cottonwood, robusta cottonwood

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I38A: Foldahl-----	5	Saskatoon serviceberry, blueleaf honeysuckle, indigobush, silverberry, western sandcherry	Amur maple, Peking cotoneaster, Siberian peashrub, nannyberry, silver buffaloberry, common chokecherry, common lilac, eastern arborvitae, eastern redcedar, late lilac, nannyberry	Manchurian crabapple, Black Hills spruce, Scotch pine, bur oak, ponderosa pine, red maple	Paper birch, common hackberry, green ash, silver maple	Imperial Carolina poplar, cottonwood
Kratka, very cobbly----	5	American plum, Nanking cherry, Siberian peashrub, golden currant, redosier dogwood	Amur maple, Peking cotoneaster, common chokecherry, indigobush, nannyberry	Manchurian apricot, Russian olive, blue spruce, Black Hills spruce, common hackberry	Green ash, laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
Strathcona-----	5	Siberian peashrub, common lilac, redosier dogwood, western sandcherry	Common chokecherry, silver buffaloberry, eastern arborvitae	Black Hills spruce, common hackberry, green ash	Laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
Kratka, depressional----	3	---	---	---	---	---
Strandquist-----	3	Siberian peashrub, common lilac, redosier dogwood, silverberry, western sandcherry	Buffaloberry, common chokecherry, late lilac, eastern arborvitae, eastern redcedar, nannyberry	Black Hills spruce, Russian olive, black ash, common hackberry, green ash	Laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
Linveltd-----	2	Nanking cherry, Saskatoon serviceberry, indigobush, silver buffaloberry	Siberian peashrub, common chokecherry, common lilac, American cranberrybush, Amur maple, eastern redcedar	Black Hills spruce, Russian olive, Scotch pine, bur oak, common hackberry	Imperial Carolina poplar, robusta cottonwood	Siberian elm, eastern cottonwood

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I39A: Linveltdt-----	65	Nanking cherry, Saskatoon serviceberry, indigobush, silver buffaloberry	Siberian peashrub, common chokecherry, common lilac, American cranberrybush, Amur maple, eastern redcedar	Black Hills spruce, Russian olive, Scotch pine, bur oak, common hackberry	Imperial Carolina poplar, robusta cottonwood	Siberian elm, eastern cottonwood
Kratka-----	14	American plum, Nanking cherry, Siberian peashrub, golden currant, redosier dogwood	Amur maple, Peking cotoneaster, common chokecherry, indigobush, nannyberry	Manchurian apricot, Russian olive, blue spruce, Black Hills spruce, common hackberry	Green ash, laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
Reiner-----	10	Russian almond, Saskatoon serviceberry, golden currant, silverberry	American cranberrybush, American plum, common chokecherry, eastern redcedar	Black Hills spruce, Manchurian apricot, blue spruce, bur oak	Laurel willow, American basswood	Siberian elm, sugar maple, eastern cottonwood
Smiley-----	5	Russian almond, golden currant, honeysuckle, indigobush, redosier dogwood	Amur maple, Arnold hawthorn, Siberian peashrub, common lilac, late lilac, American plum, common chokecherry, gray dogwood, nannyberry, silver buffaloberry	Black Hills spruce, Manchurian apricot, Manchurian crabapple, blue spruce	Green ash, quaking aspens, American basswood	Siberian elm, laurel willow, eastern cottonwood, robusta cottonwood
Eckvoll-----	3	Peking cotoneaster, Saskatoon serviceberry, silver buffaloberry, western sandcherry	Amur maple, Siberian peashrub, nannyberry, common chokecherry, eastern redcedar	Manchurian crabapple, Black Hills spruce, Scotch pine, Siberian elm, bur oak, common hackberry, green ash	Red maple, green ash, paper birch	Imperial Carolina poplar, Siouxland cottonwood

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I39A: Foldahl-----	2	Saskatoon serviceberry, blueleaf honeysuckle, indigobush, silverberry, western sandcherry	Amur maple, Peking cotoneaster, Siberian peashrub, nannyberry, silver buffaloberry, common chokecherry, common lilac, eastern arborvitae, eastern redcedar, late lilac, nannyberry	Manchurian crabapple, Black Hills spruce, Scotch pine, bur oak, ponderosa pine, red maple	Paper birch, common hackberry, green ash, silver maple	Imperial Carolina poplar, cottonwood
Pelan-----	1	Peking cotoneaster, redosier dogwood	American plum, common chokecherry, hedge cotoneaster, common lilac, silver buffaloberry	Ponderosa pine, Manchurian crabapple, bur oak, Russian olive	Green ash, Siberian elm	Silver maple, imperial Carolina poplar, eastern cottonwood
I40B: Maddock-----	85	Siberian peashrub, silver buffaloberry, western sandcherry	Common chokecherry, eastern redcedar	Bur oak, Black Hills spruce, Scotch pine, green ash	Siouxland cottonwood, red maple	---
Flaming-----	5	Peking cotoneaster, blueleaf honeysuckle, silverberry, western sandcherry	Rocky Mountain juniper, nannyberry, peashrub, silver buffaloberry, common chokecherry, eastern redcedar	Black Hills spruce, Scotch pine, ponderosa pine	Red maple, green ash, Siouxland cottonwood	---
Sandberg-----	5	Silver buffaloberry, western sandcherry	Russian olive, common chokecherry, peashrub, late lilac	Eastern redcedar, Scotch pine	Green ash, silver maple, Carolina poplar, Siouxland cottonwood	---
Halverson-----	3	Peking cotoneaster	American plum, common lilac, Amur maple, Siberian crabapple	Black Hills spruce, blue spruce, white spruce	Green ash, Siberian elm	Silver maple, eastern cottonwood

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I40B: Hamar-----	2	Nanking cherry, Siberian peashrub, redosier dogwood, silver buffaloberry	American cranberrybush, common chokecherry, common lilac	Siberian crabapple, Black Hills spruce, blue spruce, black ash, common hackberry	Green ash, laurel willow	Eastern cottonwood, imperial Carolina poplar
I40F: Maddock-----	90	Silver buffaloberry, western sandcherry	Common chokecherry, eastern redcedar	Scotch pine, bur oak, green ash	Siouxland cottonwood, red maple	---
Flaming-----	5	Peking cotoneaster, blueleaf honeysuckle, silverberry, western sandcherry	Rocky Mountain juniper, nannyberry, peashrub, silver buffaloberry, common chokecherry, eastern redcedar	Black Hills spruce, Scotch pine, ponderosa pine	Red maple, green ash, Siouxland cottonwood	---
Sandberg-----	5	Silver buffaloberry, western sandcherry	Russian olive, common chokecherry, peashrub, late lilac	Eastern redcedar, Scotch pine	Green ash, silver maple, Carolina poplar, Siouxland cottonwood	---
I41A: Markey-----	80	---	---	---	---	---
Deerwood-----	12	---	---	---	---	---
Berner-----	2	---	---	---	---	---
Hamar-----	2	Nanking cherry, Siberian peashrub, redosier dogwood, silver buffaloberry	American cranberrybush, common chokecherry, common lilac	Siberian crabapple, Black Hills spruce, blue spruce, black ash, common hackberry	Green ash, laurel willow	Eastern cottonwood, imperial Carolina poplar
Seelyeville-----	2	---	---	---	---	---
Syrene-----	2	Siberian peashrub, redosier dogwood, western sandcherry	Common chokecherry, late lilac, eastern arborvitae, nannyberry, silver buffaloberry	Black Hills spruce, common hackberry, green ash	Laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I42A:						
Markey, ponded-----	85	---	---	---	---	---
Markey-----	5	---	---	---	---	---
Deerwood-----	4	---	---	---	---	---
Seelyeville, ponded----	4	---	---	---	---	---
Hamar-----	1	Nanking cherry, Siberian peashrub, redosier dogwood, silver buffaloberry	American cranberrybush, common chokecherry, common lilac	Siberian crabapple, Black Hills spruce, blue spruce, black ash, common hackberry	Green ash, laurel willow	Eastern cottonwood, imperial Carolina poplar
Hangaard-----	1	Peking cotoneaster, sandbar willow, Siberian peashrub, redosier dogwood, western sandcherry	Amur maple, common chokecherry	Black Hills spruce, Scotch pine, black ash, common hackberry	Green ash, laurel willow, silver maple	Siberian elm, Siouxland cottonwood, imperial Carolina poplar
I43A:						
Mavie-----	70	Sandbar willow, Siberian peashrub, common lilac, indigobush	Common chokecherry, late lilac, eastern arborvitae, eastern redcedar	Black ash, Black Hills spruce, common hackberry, green ash	Laurel willow, Siberian elm, Siouxland cottonwood	---
Vallers-----	10	Russian almond, sandbar willow, Siberian peashrub, indigobush	Common chokecherry, common lilac, eastern redcedar	Black Hills spruce, blue spruce, green ash, common hackberry	Laurel willow, quaking aspen	Imperial Carolina poplar, eastern cottonwood
Strandquist-----	7	Siberian peashrub, common lilac, redosier dogwood, silverberry, western sandcherry	Buffaloberry, common chokecherry, late lilac, eastern arborvitae, eastern redcedar, nannyberry	Black Hills spruce, Russian olive, black ash, common hackberry, green ash	Laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
Strathcona-----	5	Siberian peashrub, common lilac, redosier dogwood, western sandcherry	Common chokecherry, silver buffaloberry, eastern arborvitae	Black Hills spruce, common hackberry, green ash	Laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
Strathcona, depressional	3	---	---	---	---	---

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I43A: Foxhome-----	2	Blueleaf honeysuckle, eastern redcedar, hedge cotoneaster, peashrub, silver buffaloberry, western sandcherry	Amur maple, common chokecherry, eastern arborvitae, eastern redcedar, nannyberry	Scotch pine, bur oak, ponderosa pine	Siberian elm, eastern cottonwood, green ash	---
Karlsruhe-----	2	Common lilac, silver buffaloberry, silverberry	Peashrub, common chokecherry, eastern arborvitae, eastern redcedar	Black Hills spruce, ponderosa pine, Siberian elm, green ash	Laurel willow, silver maple	Siouxland cottonwood, imperial Carolina poplar
Grimstad-----	1	Blueleaf honeysuckle, indigobush, silverberry	Arnold hawthorn, Siberian peashrub, common chokecherry, late lilac, silver buffaloberry, eastern redcedar	Black Hills spruce, black ash, ponderosa pine, bur oak	Common hackberry, green ash, laurel willow, red maple	Eastern cottonwood, imperial Carolina poplar
I44A: Newfolden-----	75	Saskatoon serviceberry, common lilac, golden currant	Siberian peashrub, common chokecherry, American cranberrybush, eastern redcedar	Black Hills spruce, Manchurian apricot, Manchurian crabapple, Russian olive, blue spruce, bur oak	American basswood, laurel willow	Siberian elm, eastern cottonwood
Smiley-----	12	Russian almond, golden currant, honeysuckle, indigobush, redosier dogwood	Amur maple, Arnold hawthorn, Siberian peashrub, common lilac, late lilac, American plum, common chokecherry, gray dogwood, nannyberry, silver buffaloberry	Black Hills spruce, Manchurian apricot, Manchurian crabapple, blue spruce	Green ash, quaking aspens, American basswood	Siberian elm, laurel willow, eastern cottonwood, robusta cottonwood
Boash-----	8	Nanking cherry, Peking cotoneaster, redosier dogwood	American plum, common chokecherry, common lilac	Eastern arborvitae, Manchurian crabapple, European larch	Siberian elm, white willow	Silver maple, imperial Carolina poplar, eastern cottonwood

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I44A: Linveltdt-----	4	Nanking cherry, Saskatoon serviceberry, indigobush, silver buffaloberry	Siberian peashrub, common chokecherry, common lilac, American cranberrybush, Amur maple, eastern redcedar	Black Hills spruce, Russian olive, Scotch pine, bur oak, common hackberry	Imperial Carolina poplar, robusta cottonwood	Siberian elm, eastern cottonwood
Hapludolls-----	1	Nanking cherry, golden currant, indigobush	American plum, Siberian peashrub, common lilac, eastern redcedar	Siberian crabapple, Russian olive, bur oak, ponderosa pine, blue spruce	Green ash, honeylocust	Siberian elm, eastern cottonwood, imperial Carolina poplar, silver maple
I45A: Northwood-----	75	---	---	---	---	---
Hamre-----	10	---	---	---	---	---
Berner-----	5	---	---	---	---	---
Kratka-----	5	American plum, Nanking cherry, Siberian peashrub, golden currant, redosier dogwood	Amur maple, Peking cotoneaster, common chokecherry, indigobush, nannyberry	Manchurian apricot, Russian olive, blue spruce, Black Hills spruce, common hackberry	Green ash, laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
Strandquist-----	3	Siberian peashrub, common lilac, redosier dogwood, silverberry, western sandcherry	Buffaloberry, common chokecherry, late lilac, eastern arborvitae, eastern redcedar, nannyberry	Black Hills spruce, Russian olive, black ash, common hackberry, green ash	Laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
Roliss-----	2	Sandbar willow, Siberian peashrub, indigobush, redosier dogwood	Common chokecherry, common lilac, cotoneaster, eastern arborvitae	Black Hills spruce, blue spruce, bur oak, common hackberry, green ash	Laurel willow, Siberian elm	Imperial Carolina poplar, eastern cottonwood
I46A: Pits-----	85	---	---	---	---	---
Udipsamments-----	10	---	---	---	---	---

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I46A: Radium-----	2	Sandbar willow, common lilac, cotoneaster, silver buffaloberry	Siberian peashrub, common chokecherry, late lilac, nannyberry	Black Hills spruce, Russian olive, eastern arborvitae, eastern redcedar, Scotch pine, common hackberry	Siberian elm, Siouxland cottonwood, green ash, laurel willow	---
Maddock-----	1	Siberian peashrub, silver buffaloberry, western sandcherry	Common chokecherry, eastern redcedar	Bur oak, Black Hills spruce, Scotch pine, green ash	Siouxland cottonwood, red maple	---
Marquette-----	1	Silver buffaloberry, western sandcherry	Russian olive, common chokecherry, peashrub, late lilac	Eastern redcedar, Scotch pine	Green ash, silver maple, Carolina poplar, Siouxland cottonwood	---
Sandberg-----	1	Silver buffaloberry, western sandcherry	Russian olive, common chokecherry, peashrub, late lilac	Eastern redcedar, Scotch pine	Green ash, silver maple, Carolina poplar, Siouxland cottonwood	---
I47A: Poppleton-----	75	Peking cotoneaster, blueleaf honeysuckle, silver buffaloberry, silverberry, western sandcherry	Rocky Mountain juniper, Siberian peashrub, late lilac, common chokecherry, eastern redcedar	Black Hills spruce, Scotch pine	Red maple, green ash	Siouxland cottonwood, imperial Carolina poplar
Flaming-----	12	Peking cotoneaster, blueleaf honeysuckle, silverberry, western sandcherry	Rocky Mountain juniper, nannyberry, peashrub, silver buffaloberry, common chokecherry, eastern redcedar	Black Hills spruce, Scotch pine, ponderosa pine	Red maple, green ash, Siouxland cottonwood	---
Garborg-----	5	Nanking cherry, Peking cotoneaster, blueleaf honeysuckle, redosier dogwood	American cranberrybush, Rocky Mountain juniper, common lilac, peashrub, common chokecherry, eastern redcedar	Siberian crabapple, blue spruce, Black Hills spruce, Scotch pine, common hackberry	Green ash, laurel willow	Eastern cottonwood, imperial Carolina poplar

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I47A: Hamar-----	3	Nanking cherry, Siberian peashrub, redosier dogwood, silver buffaloberry	American cranberrybush, common chokecherry, common lilac	Siberian crabapple, Black Hills spruce, blue spruce, black ash, common hackberry	Green ash, laurel willow	Eastern cottonwood, imperial Carolina poplar
Radium-----	2	Sandbar willow, common lilac, cotoneaster, silver buffaloberry	Siberian peashrub, common chokecherry, late lilac, nannyberry	Black Hills spruce, Russian olive, eastern arborvitae, eastern redcedar, Scotch pine, common hackberry	Siberian elm, Siouxland cottonwood, green ash, laurel willow	---
Ulen-----	2	Amur honeysuckle, indigobush, silver buffaloberry	Peking cotoneaster, Siberian peashrub, common chokecherry, silver buffaloberry, eastern arborvitae, eastern redcedar	Black Hills spruce, bur oak, ponderosa pine, bur oak, common hackberry	Laurel willow, green ash	Siberian elm, Siouxland cottonwood
Maddock-----	1	Siberian peashrub, silver buffaloberry, western sandcherry	Common chokecherry, eastern redcedar	Bur oak, Black Hills spruce, Scotch pine, green ash	Siouxland cottonwood, red maple	---
I48A: Radium-----	75	Sandbar willow, common lilac, cotoneaster, silver buffaloberry	Siberian peashrub, common chokecherry, late lilac, nannyberry	Black Hills spruce, Russian olive, eastern arborvitae, eastern redcedar, Scotch pine, common hackberry	Siberian elm, Siouxland cottonwood, green ash, laurel willow	---
Sandberg-----	7	Silver buffaloberry, western sandcherry	Russian olive, common chokecherry, peashrub, late lilac	Eastern redcedar, Scotch pine	Green ash, silver maple, Carolina poplar, Siouxland cottonwood	---
Oylen-----	5	---	Siberian peashrub, common chokecherry, nannyberry	Black Hills spruce, Russian olive, eastern arborvitae, eastern redcedar, Scotch pine, common hackberry	Siberian elm, Siouxland cottonwood, green ash, laurel willow	---

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I48A:						
Flaming-----	4	Peking cotoneaster, blueleaf honeysuckle, silverberry, western sandcherry	Rocky Mountain juniper, nannyberry, peashrub, silver buffaloberry, common chokecherry, eastern redcedar	Black Hills spruce, Scotch pine, ponderosa pine	Red maple, green ash, Siouxland cottonwood	---
Garborg-----	3	Nanking cherry, Peking cotoneaster, blueleaf honeysuckle, redosier dogwood	American cranberrybush, Rocky Mountain juniper, common lilac, peashrub, common chokecherry, eastern redcedar	Siberian crabapple, blue spruce, Black Hills spruce, Scotch pine, common hackberry	Green ash, laurel willow	Eastern cottonwood, imperial Carolina poplar
Hangaard-----	3	Peking cotoneaster, sandbar willow, Siberian peashrub, redosier dogwood, western sandcherry	Amur maple, common chokecherry	Black Hills spruce, Scotch pine, black ash, common hackberry	Green ash, laurel willow, silver maple	Siberian elm, Siouxland cottonwood, imperial Carolina poplar
Hamar-----	2	Nanking cherry, Siberian peashrub, redosier dogwood, silver buffaloberry	American cranberrybush, common chokecherry, common lilac	Siberian crabapple, Black Hills spruce, blue spruce, black ash, common hackberry	Green ash, laurel willow	Eastern cottonwood, imperial Carolina poplar
Poppleton-----	1	Peking cotoneaster, blueleaf honeysuckle, silver buffaloberry, silverberry, western sandcherry	Rocky Mountain juniper, Siberian peashrub, late lilac, common chokecherry, eastern redcedar	Black Hills spruce, Scotch pine	Red maple, green ash	Siouxland cottonwood, imperial Carolina poplar
I49A:						
Rauville-----	80	---	---	---	---	---
Fluvaquents-----	12	---	---	---	---	---
Water-----	5	---	---	---	---	---
Lamoure-----	3	American plum, Siberian peashrub, redosier dogwood	Common chokecherry, common lilac, eastern redcedar	Black Hills spruce, Manchurian crabapple, green ash	Golden willow	Eastern cottonwood

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I50A: Reiner-----	70	Russian almond, Saskatoon serviceberry, golden currant, silverberry	American cranberrybush, American plum, common chokecherry, eastern redcedar	Black Hills spruce, Manchurian apricot, blue spruce, bur oak	Laurel willow, American basswood	Siberian elm, sugar maple, eastern cottonwood
Smiley-----	12	Russian almond, golden currant, honeysuckle, indigobush, redosier dogwood	Amur maple, Arnold hawthorn, Siberian peashrub, common lilac, late lilac, American plum, common chokecherry, gray dogwood, nannyberry, silver buffaloberry	Black Hills spruce, Manchurian apricot, Manchurian crabapple, blue spruce	Green ash, quaking aspen, American basswood	Siberian elm, laurel willow, eastern cottonwood, robusta cottonwood
Reiner, very cobbly----	7	Russian almond, Saskatoon serviceberry, golden currant, silverberry	American cranberrybush, American plum, common chokecherry, eastern redcedar	Black Hills spruce, Manchurian apricot, blue spruce, bur oak	Laurel willow, American basswood	Siberian elm, sugar maple, eastern cottonwood
Linveltd-----	5	Nanking cherry, Saskatoon serviceberry, indigobush, silver buffaloberry	Siberian peashrub, common chokecherry, common lilac, American cranberrybush, Amur maple, eastern redcedar	Black Hills spruce, Russian olive, Scotch pine, bur oak, common hackberry	Imperial Carolina poplar, robusta cottonwood	Siberian elm, eastern cottonwood
Eckvoll-----	3	Peking cotoneaster, Saskatoon serviceberry, silver buffaloberry, western sandcherry	Amur maple, Siberian peashrub, nannyberry, common chokecherry, eastern redcedar	Manchurian crabapple, Black Hills spruce, Scotch pine, Siberian elm, bur oak, common hackberry, green ash	Red maple, green ash, paper birch	Imperial Carolina poplar, Siouland cottonwood
Kratka-----	3	American plum, Nanking cherry, Siberian peashrub, golden currant, redosier dogwood	Amur maple, Peking cotoneaster, common chokecherry, indigobush, nannyberry	Manchurian apricot, Russian olive, blue spruce, Black Hills spruce, common hackberry	Green ash, laurel willow, Siberian elm	Siouland cottonwood, imperial Carolina poplar

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I51A: Reiner-----	65	Saskatoon serviceberry, golden currant, silver buffaloberry, western sandcherry	American cranberrybush, American plum, Siberian peashrub, common chokecherry, common lilac, eastern redcedar	Manchurian apricot, Black Hills spruce, blue spruce, ponderosa pine, Manchurian crabapple, bur oak	Common hackberry, green ash, laurel willow, red maple	Siberian elm, Carolina poplar, eastern cottonwood
Smiley-----	9	Russian almond, golden currant, honeysuckle, indigobush, redosier dogwood	Amur maple, Arnold hawthorn, Siberian peashrub, common lilac, late lilac, American plum, common chokecherry, gray dogwood, nannyberry, silver buffaloberry	Black Hills spruce, Manchurian apricot, Manchurian crabapple, blue spruce	Green ash, quaking aspens, American basswood	Siberian elm, laurel willow, eastern cottonwood, robusta cottonwood
Reiner fine sandy loam--	8	Russian almond, Saskatoon serviceberry, golden currant, silverberry	American cranberrybush, American plum, common chokecherry, eastern redcedar	Black Hills spruce, Manchurian apricot, blue spruce, bur oak	Laurel willow, American basswood	Siberian elm, sugar maple, eastern cottonwood
Linveltd-----	7	Nanking cherry, Saskatoon serviceberry, indigobush, silver buffaloberry	Siberian peashrub, common chokecherry, common lilac, American cranberrybush, Amur maple, eastern redcedar	Black Hills spruce, Russian olive, Scotch pine, bur oak, common hackberry	Imperial Carolina poplar, robusta cottonwood	Siberian elm, eastern cottonwood
Kratka-----	5	American plum, Nanking cherry, Siberian peashrub, golden currant, redosier dogwood	Amur maple, Peking cotoneaster, common chokecherry, indigobush, nannyberry	Manchurian apricot, Russian olive, blue spruce, Black Hills spruce, common hackberry	Green ash, laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
Eckvoll-----	3	Peking cotoneaster, Saskatoon serviceberry, silver buffaloberry, western sandcherry	Amur maple, Siberian peashrub, nannyberry, common chokecherry, eastern redcedar	Manchurian crabapple, Black Hills spruce, Scotch pine, Siberian elm, bur oak, common hackberry, green ash	Red maple, green ash, paper birch	Imperial Carolina poplar, Siouxland cottonwood

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I51A: Reiner, very cobbly-----	3	Russian almond, Saskatoon serviceberry, golden currant, silverberry	American cranberrybush, American plum, common chokecherry, eastern redcedar	Black Hills spruce, Manchurian apricot, blue spruce, bur oak	Laurel willow, American basswood	Siberian elm, sugar maple, eastern cottonwood
I52A: Reis-----	55	Russian almond, Saskatoon serviceberry, Siberian peashrub, redosier dogwood	Siberian peashrub, common chokecherry, common lilac, cotoneaster, common chokecherry	White spruce, Black Hills spruce, Russian olive, blue spruce, common hackberry, green ash	Laurel willow, Siberian elm	Golden willow, imperial Carolina poplar, eastern cottonwood
Clearwater-----	30	Nanking cherry, Russian almond, Saskatoon serviceberry, Siberian peashrub, golden currant, redosier dogwood, silver buffaloberry	Common chokecherry, common lilac, cotoneaster	Black Hills spruce, blue spruce, common hackberry, green ash	Laurel willow, Siberian elm	Imperial Carolina poplar, eastern cottonwood
Clearwater, very cobbly	5	Nanking cherry, Russian almond, Saskatoon serviceberry, Siberian peashrub, golden currant, redosier dogwood, silver buffaloberry	Common chokecherry, common lilac, cotoneaster	Black Hills spruce, blue spruce, common hackberry, green ash	Laurel willow, Siberian elm	Imperial Carolina poplar, eastern cottonwood
Clearwater, depressional	3	---	---	---	---	---
Espelie-----	3	Nanking cherry, golden currant, redosier dogwood	Amur maple, Siberian peashrub, common lilac, American plum, Manchurian apricot, common chokecherry	Manchurian crabapple, black ash, blue spruce, common hackberry	Siberian elm, laurel willow	Carolina poplar, eastern cottonwood

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I52A: Hattie-----	3	American plum, Russian almond, blueleaf honeysuckle, common chokecherry, golden currant	Siberian peashrub, late lilac, Manchurian crabapple	Blue spruce, Black Hills spruce, bur oak	Common hackberry, green ash, American basswood	Siberian elm, eastern cottonwood, imperial Carolina poplar
Wyandotte-----	1	Siberian peashrub, silverberry, western sandcherry	Common chokecherry, common lilac, silver buffaloberry, eastern redcedar	Black Hills spruce, eastern arborvitae, ponderosa pine	Laurel willow, Siberian elm, eastern cottonwood	---
I53A: Roliss-----	75	Sandbar willow, Siberian peashrub, indigobush, redosier dogwood	Common chokecherry, common lilac, cotoneaster, eastern arborvitae	Black Hills spruce, blue spruce, bur oak, common hackberry, green ash	Laurel willow, Siberian elm	Imperial Carolina poplar, eastern cottonwood
Kratka-----	8	American plum, Nanking cherry, Siberian peashrub, golden currant, redosier dogwood	Amur maple, Peking cotoneaster, common chokecherry, indigobush, nannyberry	Manchurian apricot, Russian olive, blue spruce, Black Hills spruce, common hackberry	Green ash, laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
Roliss, very cobbly----	7	Sandbar willow, Siberian peashrub, indigobush, redosier dogwood	Common chokecherry, common lilac, cotoneaster, eastern arborvitae	Black Hills spruce, blue spruce, bur oak, common hackberry, green ash	Laurel willow, Siberian elm	Imperial Carolina poplar, eastern cottonwood
Kittson-----	5	Nanking cherry, Saskatoon serviceberry, golden currant, silverberry	American cranberrybush, American plum, Siberian peashrub, eastern arborvitae	Nannyberry, Manchurian apricot, Manchurian crabapple, Black Hills spruce, blue spruce, bur oak	American basswood, green ash, robusta cottonwood	Red maple, eastern cottonwood, imperial Carolina poplar
Roliss, depressional----	3	---	---	---	---	---

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I53A: Smiley-----	2	Russian almond, golden currant, honeysuckle, indigobush, redosier dogwood	Amur maple, Arnold hawthorn, Siberian peashrub, common lilac, late lilac, American plum, common chokecherry, gray dogwood, nannyberry, silver buffaloberry	Black Hills spruce, Manchurian apricot, Manchurian crabapple, blue spruce	Green ash, quaking aspen, American basswood	Siberian elm, laurel willow, eastern cottonwood, robusta cottonwood
I54A: Roliss, depressional----	80	---	---	---	---	---
Roliss-----	12	Sandbar willow, Siberian peashrub, indigobush, redosier dogwood	Common chokecherry, common lilac, cotoneaster, eastern arborvitae	Black Hills spruce, blue spruce, bur oak, common hackberry, green ash	Laurel willow, Siberian elm	Imperial Carolina poplar, eastern cottonwood
Hamre-----	5	---	---	---	---	---
Kratka-----	3	American plum, Nanking cherry, Siberian peashrub, golden currant, redosier dogwood	Amur maple, Peking cotoneaster, common chokecherry, indigobush, nannyberry	Manchurian apricot, Russian olive, blue spruce, Black Hills spruce, common hackberry	Green ash, laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
I55A: Rosewood-----	75	Siberian peashrub, common lilac, indigobush, redosier dogwood	Common chokecherry, nannyberry, silver buffaloberry, eastern arborvitae	Black Hills spruce, black ash, common hackberry, green ash	Laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
Ulen-----	10	Amur honeysuckle, indigobush	Peking cotoneaster, Siberian peashrub, common chokecherry, silver buffaloberry, eastern redcedar	Black Hills spruce, bur oak, ponderosa pine, common hackberry	Green ash, laurel willow	Carolina poplar, Siberian elm, Siouxland cottonwood
Hamar-----	6	Nanking cherry, Siberian peashrub, redosier dogwood, silver buffaloberry	American cranberrybush, common chokecherry, common lilac	Siberian crabapple, Black Hills spruce, blue spruce, black ash, common hackberry	Green ash, laurel willow	Eastern cottonwood, imperial Carolina poplar

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I55A: Rosewood, depressional--	3	---	---	---	---	---
Syrene-----	3	Siberian peashrub, redosier dogwood, western sandcherry	Common chokecherry, late lilac, eastern arborvitae, nannyberry, silver buffaloberry	Black Hills spruce, common hackberry, green ash	Laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
Karlsruhe-----	1	Common lilac, silver buffaloberry, silverberry	Peashrub, common chokecherry, eastern arborvitae, eastern redcedar	Black Hills spruce, ponderosa pine, Siberian elm, green ash	Laurel willow, silver maple	Siouxland cottonwood, imperial Carolina poplar
Strathcona-----	1	Siberian peashrub, common lilac, redosier dogwood, western sandcherry	Common chokecherry, silver buffaloberry, eastern arborvitae	Black Hills spruce, common hackberry, green ash	Laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
Thiefriever-----	1	Siberian peashrub, common lilac, redosier dogwood	Common chokecherry, nannyberry, eastern arborvitae	Black Hills spruce, black ash, green ash	Laurel willow, Siberian elm	Eastern cottonwood, imperial Carolina poplar
I56A: Rosewood-----	50	Siberian peashrub, common lilac, indigobush, redosier dogwood	Common chokecherry, nannyberry, silver buffaloberry, eastern arborvitae	Black Hills spruce, black ash, common hackberry, green ash	Laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
Venlo-----	40	---	---	---	---	---
Deerwood-----	3	---	---	---	---	---
Syrene-----	3	Siberian peashrub, redosier dogwood, western sandcherry	Common chokecherry, late lilac, eastern arborvitae, nannyberry, silver buffaloberry	Black Hills spruce, common hackberry, green ash	Laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
Ulen-----	2	Amur honeysuckle, indigobush, silver buffaloberry	Peking cotoneaster, Siberian peashrub, common chokecherry, silver buffaloberry, eastern arborvitae, eastern redcedar	Black Hills spruce, bur oak, ponderosa pine, bur oak, common hackberry	Laurel willow, green ash	Siberian elm, Siouxland cottonwood

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I56A: Strathcona-----	1	Siberian peashrub, common lilac, redosier dogwood, western sandcherry	Common chokecherry, silver buffaloberry, eastern arborvitae	Black Hills spruce, common hackberry, green ash	Laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
Thiefriver-----	1	Siberian peashrub, common lilac, redosier dogwood	Common chokecherry, nannyberry, eastern arborvitae	Black Hills spruce, black ash, green ash	Laurel willow, Siberian elm	Eastern cottonwood, imperial Carolina poplar
I57B: Sandberg-----	50	Silver buffaloberry, western sandcherry	Russian olive, common chokecherry, peashrub, late lilac	Eastern redcedar, Scotch pine	Green ash, silver maple, Carolina poplar, Siouxland cottonwood	---
Radium-----	25	Sandbar willow, common lilac, cotoneaster, silver buffaloberry	Siberian peashrub, common chokecherry, late lilac, nannyberry	Black Hills spruce, Russian olive, eastern arborvitae, eastern redcedar, Scotch pine, common hackberry	Siberian elm, Siouxland cottonwood, green ash, laurel willow	---
Sioux-----	8	Silver buffaloberry, western sandcherry	Russian olive, common chokecherry, peashrub, late lilac	Eastern redcedar, Scotch pine	Green ash, silver maple, Carolina poplar, Siouxland cottonwood	---
Oylen-----	7	---	Siberian peashrub, common chokecherry, nannyberry	Black Hills spruce, Russian olive, eastern arborvitae, eastern redcedar, Scotch pine, common hackberry	Siberian elm, Siouxland cottonwood, green ash, laurel willow	---
Flaming-----	5	Peking cotoneaster, blueleaf honeysuckle, silverberry, western sandcherry	Rocky Mountain juniper, nannyberry, peashrub, silver buffaloberry, common chokecherry, eastern redcedar	Black Hills spruce, Scotch pine, ponderosa pine	Red maple, green ash, Siouxland cottonwood	---

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I57B: Garborg-----	5	Nanking cherry, Peking cotoneaster, blueleaf honeysuckle, redosier dogwood	American cranberrybush, Rocky Mountain juniper, common lilac, peashrub, common chokecherry, eastern redcedar	Siberian crabapple, blue spruce, Black Hills spruce, Scotch pine, common hackberry	Green ash, laurel willow	Eastern cottonwood, imperial Carolina poplar
I59A: Smiley-----	65	Russian almond, golden currant, honeysuckle, indigobush, redosier dogwood	Amur maple, Arnold hawthorn, Siberian peashrub, common lilac, late lilac, American plum, common chokecherry, gray dogwood, nannyberry, silver buffaloberry	Black Hills spruce, Manchurian apricot, Manchurian crabapple, blue spruce	Green ash, quaking aspens, American basswood	Siberian elm, laurel willow, eastern cottonwood, robusta cottonwood
Smiley, very cobbly----	10	Russian almond, golden currant, honeysuckle, indigobush, redosier dogwood	Amur maple, Arnold hawthorn, Siberian peashrub, common lilac, late lilac, American plum, common chokecherry, gray dogwood, nannyberry, silver buffaloberry	Black Hills spruce, Manchurian apricot, Manchurian crabapple, blue spruce	Green ash, quaking aspens, American basswood	Siberian elm, laurel willow, eastern cottonwood, robusta cottonwood
Kratka-----	9	American plum, Nanking cherry, Siberian peashrub, golden currant, redosier dogwood	Amur maple, Peking cotoneaster, common chokecherry, indigobush, nannyberry	Manchurian apricot, Russian olive, blue spruce, Black Hills spruce, common hackberry	Green ash, laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
Roliss-----	5	Sandbar willow, Siberian peashrub, indigobush, redosier dogwood	Common chokecherry, common lilac, cotoneaster, eastern arborvitae	Black Hills spruce, blue spruce, bur oak, common hackberry, green ash	Laurel willow, Siberian elm	Imperial Carolina poplar, eastern cottonwood
Reiner-----	4	Russian almond, Saskatoon serviceberry, golden currant, silverberry	American cranberrybush, American plum, common chokecherry, eastern redcedar	Black Hills spruce, Manchurian apricot, blue spruce, bur oak	Laurel willow, American basswood	Siberian elm, sugar maple, eastern cottonwood

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I59A: Linveltdt-----	3	Nanking cherry, Saskatoon serviceberry, indigobush, silver buffaloberry	Siberian peashrub, common chokecherry, common lilac, American cranberrybush, Amur maple, eastern redcedar	Black Hills spruce, Russian olive, Scotch pine, bur oak, common hackberry	Imperial Carolina poplar, robusta cottonwood	Siberian elm, eastern cottonwood
Smiley, depressional----	3	---	---	---	---	---
Strandquist-----	1	Siberian peashrub, common lilac, redosier dogwood, silverberry, western sandcherry	Buffaloberry, common chokecherry, late lilac, eastern arborvitae, eastern redcedar, nannyberry	Black Hills spruce, Russian olive, black ash, common hackberry, green ash	Laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
I60A: Smiley, depressional----	80	---	---	---	---	---
Smiley-----	10	Russian almond, golden currant, honeysuckle, indigobush, redosier dogwood	Amur maple, Arnold hawthorn, Siberian peashrub, common lilac, late lilac, American plum, common chokecherry, gray dogwood, nannyberry, silver buffaloberry	Black Hills spruce, Manchurian apricot, Manchurian crabapple, blue spruce	Green ash, quaking aspens, American basswood	Siberian elm, laurel willow, eastern cottonwood, robusta cottonwood
Hamre-----	5	---	---	---	---	---
Kratka-----	5	American plum, Nanking cherry, Siberian peashrub, golden currant, redosier dogwood	Amur maple, Peking cotoneaster, common chokecherry, indigobush, nannyberry	Manchurian apricot, Russian olive, blue spruce, Black Hills spruce, common hackberry	Green ash, laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
I61A: Strandquist-----	70	Siberian peashrub, common lilac, redosier dogwood, silverberry, western sandcherry	Buffaloberry, common chokecherry, late lilac, eastern arborvitae, eastern redcedar, nannyberry	Black Hills spruce, Russian olive, black ash, common hackberry, green ash	Laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I61A:						
Mavie-----	8	Sandbar willow, Siberian peashrub, common lilac, indigobush	Common chokecherry, late lilac, eastern arborvitae, eastern redcedar	Black ash, Black Hills spruce, common hackberry, green ash	Laurel willow, Siberian elm, Siouxland cottonwood	---
Roliss-----	7	Sandbar willow, Siberian peashrub, indigobush, redosier dogwood	Common chokecherry, common lilac, cotoneaster, eastern arborvitae	Black Hills spruce, blue spruce, bur oak, common hackberry, green ash	Laurel willow, Siberian elm	Imperial Carolina poplar, eastern cottonwood
Kratka-----	5	American plum, Nanking cherry, Siberian peashrub, golden currant, redosier dogwood	Amur maple, Peking cotoneaster, common chokecherry, indigobush, nannyberry	Manchurian apricot, Russian olive, blue spruce, Black Hills spruce, common hackberry	Green ash, laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
Foxhome-----	4	Blueleaf honeysuckle, eastern redcedar, hedge cotoneaster, peashrub, silver buffaloberry, western sandcherry	Amur maple, common chokecherry, eastern arborvitae, eastern redcedar, nannyberry	Scotch pine, bur oak, ponderosa pine	Siberian elm, eastern cottonwood, green ash	---
Hangaard-----	3	Peking cotoneaster, sandbar willow, Siberian peashrub, redosier dogwood, western sandcherry	Amur maple, common chokecherry	Black Hills spruce, Scotch pine, black ash, common hackberry	Green ash, laurel willow, silver maple	Siberian elm, Siouxland cottonwood, imperial Carolina poplar
Northwood-----	3	---	---	---	---	---
I62A:						
Syrene-----	70	Siberian peashrub, redosier dogwood, western sandcherry	Common chokecherry, late lilac, eastern arborvitae, nannyberry, silver buffaloberry	Black Hills spruce, common hackberry, green ash	Laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
Rosewood-----	11	Siberian peashrub, common lilac, indigobush, redosier dogwood	Common chokecherry, nannyberry, silver buffaloberry, eastern arborvitae	Black Hills spruce, black ash, common hackberry, green ash	Laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I62A: Hangaard-----	5	Peking cotoneaster, sandbar willow, Siberian peashrub, redosier dogwood, western sandcherry	Amur maple, common chokecherry	Black Hills spruce, Scotch pine, black ash, common hackberry	Green ash, laurel willow, silver maple	Siberian elm, Siouxland cottonwood, imperial Carolina poplar
Karlsruhe-----	4	Common lilac, silver buffaloberry, silverberry	Peashrub, common chokecherry, eastern arborvitae, eastern redcedar	Black Hills spruce, ponderosa pine, Siberian elm, green ash	Laurel willow, silver maple	Siouxland cottonwood, imperial Carolina poplar
Deerwood-----	3	---	---	---	---	---
Hamar-----	3	Nanking cherry, Siberian peashrub, redosier dogwood, silver buffaloberry	American cranberrybush, common chokecherry, common lilac	Siberian crabapple, Black Hills spruce, blue spruce, black ash, common hackberry	Green ash, laurel willow	Eastern cottonwood, imperial Carolina poplar
Strandquist-----	2	Siberian peashrub, common lilac, redosier dogwood, silverberry, western sandcherry	Buffaloberry, common chokecherry, late lilac, eastern arborvitae, eastern redcedar, nannyberry	Black Hills spruce, Russian olive, black ash, common hackberry, green ash	Laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
Radium-----	1	Sandbar willow, common lilac, cotoneaster, silver buffaloberry	Siberian peashrub, common chokecherry, late lilac, nannyberry	Black Hills spruce, Russian olive, eastern arborvitae, eastern redcedar, Scotch pine, common hackberry	Siberian elm, Siouxland cottonwood, green ash, laurel willow	---
Wyandotte-----	1	Siberian peashrub, silverberry, western sandcherry	Common chokecherry, common lilac, silver buffaloberry, eastern redcedar	Black Hills spruce, eastern arborvitae, ponderosa pine	Laurel willow, Siberian elm, eastern cottonwood	---
I63A: Thiefriever-----	70	Siberian peashrub, common lilac, redosier dogwood	Common chokecherry, nannyberry, eastern arborvitae	Black Hills spruce, black ash, green ash	Laurel willow, Siberian elm	Eastern cottonwood, imperial Carolina poplar

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I63A: Espelie-----	10	Nanking cherry, golden currant, redosier dogwood	Amur maple, Siberian peashrub, common lilac, American plum, Manchurian apricot, common chokecherry	Manchurian crabapple, black ash, blue spruce, common hackberry	Siberian elm, laurel willow	Carolina poplar, eastern cottonwood
Foxlake-----	7	Nanking cherry, Russian almond, Saskatoon serviceberry, Siberian peashrub, golden currant, redosier dogwood, silver buffaloberry	Common chokecherry, common lilac, eastern arborvitae	Black Hills spruce, blue spruce, common hackberry, green ash	Laurel willow, Siberian elm	Imperial Carolina poplar, eastern cottonwood
Huot-----	5	Indigobush, sargent crabapple, silverberry	Siberian peashrub, common chokecherry, common lilac, eastern arborvitae, eastern redcedar	Ponderosa pine, black ash, bur oak	Common hackberry, green ash	Siberian elm, eastern cottonwood
Clearwater, depressional	3	---	---	---	---	---
Rosewood-----	3	Siberian peashrub, common lilac, indigobush, redosier dogwood	Common chokecherry, nannyberry, silver buffaloberry, eastern arborvitae	Black Hills spruce, black ash, common hackberry, green ash	Laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
Ulen-----	1	Amur honeysuckle, indigobush	Peking cotoneaster, Siberian peashrub, common chokecherry, silver buffaloberry, eastern redcedar	Black Hills spruce, bur oak, ponderosa pine, common hackberry	Green ash, laurel willow	Carolina poplar, Siberian elm, Siouxland cottonwood
Wyandotte-----	1	Siberian peashrub, silverberry, western sandcherry	Common chokecherry, common lilac, silver buffaloberry, eastern redcedar	Black Hills spruce, eastern arborvitae, ponderosa pine	Laurel willow, Siberian elm, eastern cottonwood	---

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I64A: Ulen-----	70	Amur honeysuckle, indigobush	Peking cotoneaster, Siberian peashrub, common chokecherry, silver buffaloberry, eastern redcedar	Black Hills spruce, bur oak, ponderosa pine, common hackberry	Green ash, laurel willow	Carolina poplar, Siberian elm, Siouxland cottonwood
Rosewood-----	10	Siberian peashrub, common lilac, indigobush, redosier dogwood	Common chokecherry, nannyberry, silver buffaloberry, eastern arborvitae	Black Hills spruce, black ash, common hackberry, green ash	Laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
Flaming-----	8	Peking cotoneaster, blueleaf honeysuckle, silverberry, western sandcherry	Rocky Mountain juniper, nannyberry, peashrub, silver buffaloberry, common chokecherry, eastern redcedar	Black Hills spruce, Scotch pine, ponderosa pine	Red maple, green ash, Siouxland cottonwood	---
Karlsruhe-----	5	Common lilac, silver buffaloberry, silverberry	Peashrub, common chokecherry, eastern arborvitae, eastern redcedar	Black Hills spruce, ponderosa pine, Siberian elm, green ash	Laurel willow, silver maple	Siouxland cottonwood, imperial Carolina poplar
Radium-----	3	Sandbar willow, common lilac, cotoneaster, silver buffaloberry	Siberian peashrub, common chokecherry, late lilac, nannyberry	Black Hills spruce, Russian olive, eastern arborvitae, eastern redcedar, Scotch pine, common hackberry	Siberian elm, Siouxland cottonwood, green ash, laurel willow	---
Strathcona-----	2	Siberian peashrub, common lilac, redosier dogwood, western sandcherry	Common chokecherry, silver buffaloberry, eastern arborvitae	Black Hills spruce, common hackberry, green ash	Laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
Thiefriver-----	2	Siberian peashrub, common lilac, redosier dogwood	Common chokecherry, nannyberry, eastern arborvitae	Black Hills spruce, black ash, green ash	Laurel willow, Siberian elm	Eastern cottonwood, imperial Carolina poplar

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I65A: Ulen-----	70	Amur honeysuckle, indigobush, silver buffaloberry	Peking cotoneaster, Siberian peashrub, common chokecherry, silver buffaloberry, eastern arborvitae, eastern redcedar	Black Hills spruce, bur oak, ponderosa pine, bur oak, common hackberry	Laurel willow, green ash	Siberian elm, Siouxland cottonwood
Rosewood-----	10	Siberian peashrub, common lilac, indigobush, redosier dogwood	Common chokecherry, nannyberry, silver buffaloberry, eastern arborvitae	Black Hills spruce, black ash, common hackberry, green ash	Laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
Flaming-----	6	Peking cotoneaster, blueleaf honeysuckle, silverberry, western sandcherry	Rocky Mountain juniper, nannyberry, peashrub, silver buffaloberry, common chokecherry, eastern redcedar	Black Hills spruce, Scotch pine, ponderosa pine	Red maple, green ash, Siouxland cottonwood	---
Poppleton-----	4	Peking cotoneaster, blueleaf honeysuckle, silver buffaloberry, silverberry, western sandcherry	Rocky Mountain juniper, Siberian peashrub, late lilac, common chokecherry, eastern redcedar	Black Hills spruce, Scotch pine	Red maple, green ash	Siouxland cottonwood, imperial Carolina poplar
Karlsruhe-----	3	Common lilac, silver buffaloberry, silverberry	Peashrub, common chokecherry, eastern arborvitae, eastern redcedar	Black Hills spruce, ponderosa pine, Siberian elm, green ash	Laurel willow, silver maple	Siouxland cottonwood, imperial Carolina poplar
Radium-----	3	Sandbar willow, common lilac, cotoneaster, silver buffaloberry	Siberian peashrub, common chokecherry, late lilac, nannyberry	Black Hills spruce, Russian olive, eastern arborvitae, eastern redcedar, Scotch pine, common hackberry	Siberian elm, Siouxland cottonwood, green ash, laurel willow	---
Strathcona-----	2	Siberian peashrub, common lilac, redosier dogwood, western sandcherry	Common chokecherry, silver buffaloberry, eastern arborvitae	Black Hills spruce, common hackberry, green ash	Laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I65A: Thiefriver-----	2	Siberian peashrub, common lilac, redosier dogwood	Common chokecherry, nannyberry, eastern arborvitae	Black Hills spruce, black ash, green ash	Laurel willow, Siberian elm	Eastern cottonwood, imperial Carolina poplar
I66A: Vallars-----	75	Russian almond, sandbar willow, Siberian peashrub, indigobush	Common chokecherry, common lilac, eastern redcedar	Black Hills spruce, blue spruce, green ash, common hackberry	Laurel willow, quaking aspen	Imperial Carolina poplar, eastern cottonwood
Vallars, very cobbly---	7	Russian almond, sandbar willow, Siberian peashrub, indigobush	Common chokecherry, common lilac, eastern redcedar	Black Hills spruce, blue spruce, green ash, common hackberry	Laurel willow, quaking aspen	Imperial Carolina poplar, eastern cottonwood
Hamerly-----	6	Russian almond, Saskatoon serviceberry, blueleaf honeysuckle, indigobush	Arnold hawthorn, Siberian peashrub, common lilac, silver buffaloberry, eastern redcedar	Blue spruce, bur oak, ponderosa pine	Common hackberry, green ash, laurel willow	Siberian elm, eastern cottonwood
Grimstad-----	3	Blueleaf honeysuckle, indigobush, silverberry	Arnold hawthorn, Siberian peashrub, common chokecherry, late lilac, silver buffaloberry, eastern redcedar	Black Hills spruce, black ash, ponderosa pine, bur oak	Common hackberry, green ash, laurel willow, red maple	Eastern cottonwood, imperial Carolina poplar
Mavie-----	3	Sandbar willow, Siberian peashrub, common lilac, indigobush	Common chokecherry, late lilac, eastern arborvitae, eastern redcedar	Black ash, Black Hills spruce, common hackberry, green ash	Laurel willow, Siberian elm, Siouxland cottonwood	---
Roliss, depressional---	3	---	---	---	---	---
Strathcona-----	3	Siberian peashrub, common lilac, redosier dogwood, western sandcherry	Common chokecherry, silver buffaloberry, eastern arborvitae	Black Hills spruce, common hackberry, green ash	Laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I67A: Wheatville-----	70	Blueleaf honeysuckle, indigobush, silverberry	Siberian peashrub, common chokecherry, common lilac, silver buffaloberry, eastern arborvitae, eastern redcedar	Black Hills spruce, ponderosa pine, bur oak, common hackberry, green ash	Laurel willow, silver maple	Eastern cottonwood, imperial Carolina poplar
Augsburg-----	13	Russian almond, sandbar willow, indigobush, redosier dogwood	Common chokecherry, common lilac, silver buffaloberry	Black Hills spruce, common hackberry	Laurel willow, green ash, robusta cottonwood	Eastern cottonwood, imperial Carolina poplar
Glyndon-----	8	Blueleaf honeysuckle, indigobush, silverberry	Siberian peashrub, common chokecherry, common lilac, silver buffaloberry, common lilac, eastern arborvitae, eastern redcedar	Black Hills spruce, ponderosa pine, bur oak, common hackberry	Common hackberry, green ash, laurel willow, laurel willow, silver maple	Imperial Carolina poplar, eastern cottonwood
Foxlake-----	5	Nanking cherry, Russian almond, Saskatoon serviceberry, Siberian peashrub, golden currant, redosier dogwood, silver buffaloberry	Common chokecherry, common lilac, eastern arborvitae	Black Hills spruce, blue spruce, common hackberry, green ash	Laurel willow, Siberian elm	Imperial Carolina poplar, eastern cottonwood
Hilaire-----	2	American plum, Peking cotoneaster, Saskatoon serviceberry, western sandcherry	Saskatoon serviceberry, Siberian peashrub, Amur maple, common chokecherry, eastern redcedar, nannyberry	Manchurian crabapple, Black Hills spruce, Scotch pine, bur oak, paper birch	Common hackberry, green ash	Siberian elm, Siouxland cottonwood, imperial Carolina poplar
Ulen-----	2	Amur honeysuckle, indigobush, silver buffaloberry	Peking cotoneaster, Siberian peashrub, common chokecherry, silver buffaloberry, eastern arborvitae, eastern redcedar	Black Hills spruce, bur oak, ponderosa pine, bur oak, common hackberry	Laurel willow, green ash	Siberian elm, Siouxland cottonwood

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I68A: Wheatville-----	70	Blueleaf honeysuckle, indigobush, silverberry	Siberian peashrub, common chokecherry, common lilac, silver buffaloberry, eastern arborvitae, eastern redcedar	Black Hills spruce, bur oak, ponderosa pine, common hackberry, green ash	Laurel willow, silver maple	Eastern cottonwood, imperial Carolina poplar
Augsburg-----	13	Russian almond, sandbar willow, indigobush, redosier dogwood	Common chokecherry, common lilac, silver buffaloberry	Black Hills spruce, common hackberry	Laurel willow, green ash, robusta cottonwood	Eastern cottonwood, imperial Carolina poplar
Glyndon-----	8	Blueleaf honeysuckle, indigobush, silverberry	Siberian peashrub, common chokecherry, common lilac, silver buffaloberry, common lilac, eastern arborvitae, eastern redcedar	Black Hills spruce, ponderosa pine, ponderosa pine, bur oak, common hackberry	Common hackberry, green ash, laurel willow, laurel willow, silver maple	Imperial Carolina poplar, eastern cottonwood
Foxlake-----	5	Nanking cherry, Russian almond, Saskatoon serviceberry, Siberian peashrub, golden currant, redosier dogwood, silver buffaloberry	Common chokecherry, common lilac, eastern arborvitae	Black Hills spruce, blue spruce, common hackberry, green ash	Laurel willow, Siberian elm	Imperial Carolina poplar, eastern cottonwood
Hilaire-----	2	American plum, Peking cotoneaster, Saskatoon serviceberry, western sandcherry	Saskatoon serviceberry, Siberian peashrub, Amur maple, common chokecherry, eastern redcedar, nannyberry	Manchurian crabapple, Black Hills spruce, Scotch pine, bur oak, paper birch	Common hackberry, green ash	Siberian elm, Siouxland cottonwood, imperial Carolina poplar
Ulen-----	2	Amur honeysuckle, indigobush, silver buffaloberry	Peking cotoneaster, Siberian peashrub, common chokecherry, silver buffaloberry, eastern arborvitae, eastern redcedar	Black Hills spruce, bur oak, ponderosa pine, bur oak, common hackberry	Laurel willow, green ash	Siberian elm, Siouxland cottonwood

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I69A: Wyandotte-----	65	Siberian peashrub, silverberry, western sandcherry	Common chokecherry, common lilac, silver buffaloberry, eastern redcedar	Black Hills spruce, eastern arborvitae, ponderosa pine	Laurel willow, Siberian elm, eastern cottonwood	---
Foxlake-----	10	Nanking cherry, Russian almond, Saskatoon serviceberry, Siberian peashrub, golden currant, redosier dogwood, silver buffaloberry	Common chokecherry, common lilac, eastern arborvitae	Black Hills spruce, blue spruce, common hackberry, green ash	Laurel willow, Siberian elm	Imperial Carolina poplar, eastern cottonwood
Espelie-----	8	Nanking cherry, golden currant, redosier dogwood	Amur maple, Siberian peashrub, common lilac, American plum, Manchurian apricot, common chokecherry	Manchurian crabapple, black ash, blue spruce, common hackberry	Siberian elm, laurel willow	Carolina poplar, eastern cottonwood
Clearwater, depressional	5	---	---	---	---	---
Thiefriver-----	5	Siberian peashrub, common lilac, redosier dogwood	Common chokecherry, nannyberry, eastern arborvitae	Black Hills spruce, black ash, green ash	Laurel willow, Siberian elm	Eastern cottonwood, imperial Carolina poplar
Karlsruhe-----	4	Common lilac, silver buffaloberry, silverberry	Peashrub, common chokecherry, eastern arborvitae, eastern redcedar	Black Hills spruce, ponderosa pine, Siberian elm, green ash	Laurel willow, silver maple	Siouxland cottonwood, imperial Carolina poplar
Syrene-----	3	Siberian peashrub, redosier dogwood, western sandcherry	Common chokecherry, late lilac, eastern arborvitae, nannyberry, silver buffaloberry	Black Hills spruce, common hackberry, green ash	Laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
I70A: Strathcona-----	70	Siberian peashrub, common lilac, redosier dogwood, western sandcherry	Common chokecherry, silver buffaloberry, eastern arborvitae	Black Hills spruce, common hackberry, green ash	Laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Pct. of map unit	Trees having predicted 20-year average height, in feet, of--				
		<8	8-15	16-25	26-35	>35
I70A:						
Kratka-----	10	American plum, Nanking cherry, Siberian peashrub, golden currant, redosier dogwood	Amur maple, Peking cotoneaster, common chokecherry, indigobush, nannyberry	Manchurian apricot, Russian olive, blue spruce, Black Hills spruce, common hackberry	Green ash, laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
Roliss-----	6	Sandbar willow, Siberian peashrub, indigobush, redosier dogwood	Common chokecherry, common lilac, cotoneaster, eastern arborvitae	Black Hills spruce, blue spruce, bur oak, common hackberry, green ash	Laurel willow, Siberian elm	Imperial Carolina poplar, eastern cottonwood
Grimstad-----	5	Blueleaf honeysuckle, indigobush, silverberry	Arnold hawthorn, Siberian peashrub, common chokecherry, late lilac, silver buffaloberry, eastern redcedar	Black Hills spruce, black ash, ponderosa pine, bur oak	Common hackberry, green ash, laurel willow, red maple	Eastern cottonwood, imperial Carolina poplar
Mavie-----	3	Sandbar willow, Siberian peashrub, common lilac, indigobush	Common chokecherry, late lilac, eastern arborvitae, eastern redcedar	Black ash, Black Hills spruce, common hackberry, green ash	Laurel willow, Siberian elm, Siouxland cottonwood	---
Rosewood-----	3	Siberian peashrub, common lilac, indigobush, redosier dogwood	Common chokecherry, nannyberry, silver buffaloberry, eastern arborvitae	Black Hills spruce, black ash, common hackberry, green ash	Laurel willow, Siberian elm	Siouxland cottonwood, imperial Carolina poplar
Strathcona, depressional	3	---	---	---	---	---

Table 11.--Hybrid Poplar Management Considerations

(See text for a description of the considerations listed in this table)

Map symbol and soil name	Pct. of map unit	Hybrid poplar management considerations
B109A: Bowstring-----	45	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Fluvaquents-----	40	Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Hapludalfs-----	5	Slope Potential for ground-water contamination Potential for surface-water contamination Water erosion Wind erosion
Seelyeville-----	5	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Water-----	5	Not applicable
B200A: Garnes-----	70	Lime content Potential for ground-water contamination Wind erosion
Chilgren-----	13	Lime content Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Eckvoll-----	5	Limited available water capacity Potential for ground-water contamination Wind erosion
Garnes, very stony-----	5	Lime content Potential for ground-water contamination Potential for surface-water contamination Water erosion
Grygla-----	4	Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Pelan-----	3	Lime content Limited available water capacity Potential for ground-water contamination Wind erosion

Table 11.--Hybrid Poplar Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Hybrid poplar management considerations
E201A: Chilgren-----	75	Lime content Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Garnes-----	9	Lime content Potential for ground-water contamination Wind erosion
Grygla-----	5	Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Grygla, depressional-----	5	High content of organic matter Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Hamre-----	5	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Pelan-----	1	Lime content Limited available water capacity Potential for ground-water contamination Wind erosion
E202A: Cathro-----	80	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Hamre-----	8	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Chilgren-----	3	Lime content Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion

Table 11.--Hybrid Poplar Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Hybrid poplar management considerations
E202A: Northwood-----	3	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Bernier-----	2	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Grygla-----	2	Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Seelyeville-----	2	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
E203A: Northwood-----	75	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Hamre-----	10	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Grygla-----	7	Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Bernier-----	5	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Chilgren-----	3	Lime content Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion

Table 11.--Hybrid Poplar Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Hybrid poplar management considerations
E204A: Roliss-----	75	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Grygla-----	8	Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Chilgren-----	5	Lime content Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Garnes-----	5	Lime content Potential for ground-water contamination Wind erosion
Roliss, depressiona-----	5	High content of organic matter Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Hamre-----	2	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
E205A: Berner-----	80	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Northwood-----	7	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Grygla-----	5	Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion

Table 11.--Hybrid Poplar Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Hybrid poplar management considerations
E205A: Cathro-----	3	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Hamre-----	3	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Seelyeville-----	2	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
E206A: Hamre-----	80	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Chilgren-----	8	Lime content Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Northwood-----	5	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Cathro-----	3	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Grygla-----	2	Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Roliss-----	2	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion

Table 11.--Hybrid Poplar Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Hybrid poplar management considerations
I1A:		
Augsburg-----	75	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Borup-----	10	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Foxlake-----	5	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Restricted permeability Wet soil moisture status Wind erosion
Augsburg, depressional-----	3	High content of organic matter Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Wheatville-----	3	Lime content Potential for ground-water contamination Wind erosion
Glyndon-----	2	Lime content Potential for ground-water contamination Wind erosion
Espelie-----	1	Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Hattie-----	1	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Restricted permeability
I2A:		
Augsburg-----	75	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Borup-----	10	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion

Table 11.--Hybrid Poplar Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Hybrid poplar management considerations
I2A: Foxlake-----	5	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Restricted permeability Wet soil moisture status Wind erosion
Augsburg, depressional-----	3	High content of organic matter Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Wheatville-----	3	Lime content Potential for ground-water contamination Wind erosion
Glyndon-----	2	Lime content Potential for ground-water contamination Wind erosion
Espelie-----	1	Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Hattie-----	1	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Restricted permeability
I3A: Berner-----	80	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Northwood-----	7	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Kratka-----	5	Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Hamre-----	3	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion

Table 11.--Hybrid Poplar Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Hybrid poplar management considerations
I3A: Strathcona-----	3	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Seelyeville-----	2	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I4A: Berner-----	30	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Rosewood, depressional-----	30	High content of organic matter Lime content Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Strathcona, depressional-----	30	High content of organic matter Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Rosewood-----	4	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wind erosion
Deerwood-----	2	High content of organic matter Lime content Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Mavie-----	2	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion

Table 11.--Hybrid Poplar Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Hybrid poplar management considerations
I4A: Strathcona-----	2	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I5A: Borup-----	75	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Glyndon-----	9	Lime content Potential for ground-water contamination Wind erosion
Rosewood-----	8	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wind erosion
Augsburg-----	5	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Augsburg, depressional-----	3	High content of organic matter Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I6A: Borup-----	75	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Glyndon-----	9	Lime content Potential for ground-water contamination Wind erosion
Rosewood-----	8	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wind erosion
Augsburg-----	5	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion

Table 11.--Hybrid Poplar Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Hybrid poplar management considerations
I6A: Augsburg, depressional-----	3	High content of organic matter Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I7A: Bowstring-----	45	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Fluvaquents-----	45	Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Hapludolls-----	5	Slope Lime content Potential for surface-water contamination Water erosion
Water-----	5	Not applicable
I8A: Cathro-----	80	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Hamre-----	8	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Northwood-----	3	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Roliss-----	3	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Berner-----	2	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion

Table 11.--Hybrid Poplar Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Hybrid poplar management considerations
I8A:		
Kratka-----	2	Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Seelyeville-----	2	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I9A:		
Clearwater-----	80	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Restricted permeability Wet soil moisture status
Clearwater, very cobbly-----	5	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Restricted permeability Wet soil moisture status
Reis-----	5	Lime content Limited available water capacity Potential for ground-water contamination Restricted permeability Wet soil moisture status
Clearwater, depressional-----	3	High content of organic matter Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Restricted permeability Wet soil moisture status
Espelie-----	3	Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Foxlake-----	2	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Restricted permeability Wet soil moisture status Wind erosion
Hattie-----	1	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Restricted permeability

Table 11.--Hybrid Poplar Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Hybrid poplar management considerations
I9A: Huot-----	1	Lime content Limited available water capacity Potential for ground-water contamination Wind erosion
I10A: Clearwater, depressional----	85	High content of organic matter Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Restricted permeability Wet soil moisture status
Clearwater-----	9	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Restricted permeability Wet soil moisture status
Augsburg, depressional-----	3	High content of organic matter Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Reis-----	2	Lime content Limited available water capacity Potential for ground-water contamination Restricted permeability Wet soil moisture status
Espelie-----	1	Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I11A: Deerwood-----	85	High content of organic matter Lime content Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Rosewood-----	6	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wind erosion

Table 11.--Hybrid Poplar Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Hybrid poplar management considerations
I11A: Markey-----	3	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Strathcona-----	2	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Syrene-----	2	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Venlo-----	2	High content of organic matter Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I12A: Eckvoll-----	70	Limited available water capacity Potential for ground-water contamination Wind erosion
Kratka-----	8	Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Smiley-----	7	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Linveldt-----	5	Lime content Limited available water capacity Potential for ground-water contamination Wind erosion
Reiner-----	5	Lime content Potential for ground-water contamination Wind erosion
Foldahl-----	2	Limited available water capacity Potential for ground-water contamination Wind erosion
Pelan-----	2	Lime content Limited available water capacity Potential for ground-water contamination Wind erosion

Table 11.--Hybrid Poplar Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Hybrid poplar management considerations
I12A: Poppleton-----	1	Limited available water capacity Potential for ground-water contamination Wind erosion
I13A: Espelie-----	75	Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Foxlake-----	8	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Restricted permeability Wet soil moisture status Wind erosion
Hilaire-----	7	Limited available water capacity Potential for ground-water contamination Wind erosion
Clearwater, depressional----	5	High content of organic matter Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Restricted permeability Wet soil moisture status
Thiefriever-----	5	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I14B: Fairdale-----	85	Slope Lime content Potential for ground-water contamination Potential for surface-water contamination Water erosion Wind erosion
Fluvaquents-----	6	Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Hapludolls-----	5	Slope Lime content Potential for surface-water contamination Water erosion
Hapludalfs-----	2	Slope Potential for ground-water contamination Potential for surface-water contamination Water erosion Wind erosion

Table 11.--Hybrid Poplar Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Hybrid poplar management considerations
I14B: Zell-----	2	Slope Lime content Potential for ground-water contamination Potential for surface-water contamination Water erosion Wind erosion
I14D: Fairdale-----	85	Slope Lime content Potential for ground-water contamination Potential for surface-water contamination Water erosion Wind erosion
Fluvaquents-----	6	Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Hapludolls-----	4	Slope Lime content Potential for surface-water contamination Water erosion
Zell-----	3	Slope Lime content Potential for ground-water contamination Potential for surface-water contamination Water erosion Wind erosion
Hapludalfs-----	2	Slope Potential for ground-water contamination Potential for surface-water contamination Water erosion Wind erosion
I15A: Flaming-----	70	Limited available water capacity Potential for ground-water contamination Wind erosion
Garborg-----	10	Limited available water capacity Potential for ground-water contamination Wind erosion
Hamar-----	5	Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wind erosion
Ulen-----	5	Lime content Limited available water capacity Potential for ground-water contamination Wind erosion
Poppleton-----	3	Limited available water capacity Potential for ground-water contamination Wind erosion

Table 11.--Hybrid Poplar Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Hybrid poplar management considerations
I15A: Sandberg-----	3	Slope Lime content Limited available water capacity Potential for ground-water contamination Wind erosion
Foldahl-----	2	Limited available water capacity Potential for ground-water contamination Wind erosion
Radium-----	2	Limited available water capacity Potential for ground-water contamination Wind erosion
I16F: Fluvaquents-----	55	Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Hapludolls-----	25	Slope Lime content Potential for surface-water contamination Water erosion
Hapludalfs-----	7	Slope Potential for ground-water contamination Potential for surface-water contamination Water erosion Wind erosion
Fairdale-----	5	Slope Lime content Potential for ground-water contamination Potential for surface-water contamination Water erosion Wind erosion
Water-----	5	Not applicable
Bowstring-----	2	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Rauville-----	1	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I17A: Foldahl-----	75	Limited available water capacity Potential for ground-water contamination Wind erosion
Kratka-----	10	Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion

Table 11.--Hybrid Poplar Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Hybrid poplar management considerations
I17A:		
Roliss-----	5	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Flaming-----	4	Limited available water capacity Potential for ground-water contamination Wind erosion
Grimstad-----	2	Lime content Potential for ground-water contamination Wind erosion
Linveldt-----	2	Lime content Limited available water capacity Potential for ground-water contamination Wind erosion
Eckvoll-----	1	Limited available water capacity Potential for ground-water contamination Wind erosion
Strathcona-----	1	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I18A:		
Foldahl-----	75	Limited available water capacity Potential for ground-water contamination Wind erosion
Kratka-----	10	Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Roliss-----	5	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Flaming-----	4	Limited available water capacity Potential for ground-water contamination Wind erosion
Grimstad-----	2	Lime content Potential for ground-water contamination Wind erosion
Linveldt-----	2	Lime content Limited available water capacity Potential for ground-water contamination Wind erosion
Eckvoll-----	1	Limited available water capacity Potential for ground-water contamination Wind erosion

Table 11.--Hybrid Poplar Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Hybrid poplar management considerations
I18A: Strathcona-----	1	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I19A: Foxhome-----	65	Lime content Limited available water capacity Potential for ground-water contamination Wind erosion
Kittson-----	10	Lime content Potential for ground-water contamination
Strandquist-----	10	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Foldahl-----	5	Limited available water capacity Potential for ground-water contamination Wind erosion
Grimstad-----	5	Lime content Potential for ground-water contamination Wind erosion
Roliss-----	3	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Mavie-----	2	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I20A: Foxlake-----	75	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Restricted permeability Wet soil moisture status Wind erosion
Clearwater-----	5	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Restricted permeability Wet soil moisture status

Table 11.--Hybrid Poplar Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Hybrid poplar management considerations
I20A: Foxlake, very cobbly-----	5	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Restricted permeability Wet soil moisture status Wind erosion
Augsburg-----	3	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Clearwater, depressional-----	3	High content of organic matter Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Restricted permeability Wet soil moisture status
Espelie-----	3	Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Hilaire-----	2	Limited available water capacity Potential for ground-water contamination Wind erosion
Reis-----	2	Lime content Limited available water capacity Potential for ground-water contamination Restricted permeability Wet soil moisture status
Wheatville-----	2	Lime content Potential for ground-water contamination Wind erosion
I21A: Fram-----	85	Lime content Potential for ground-water contamination Wind erosion
Hedman-----	12	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Strathcona-----	2	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Foxhome-----	1	Lime content Limited available water capacity Potential for ground-water contamination Wind erosion

Table 11.--Hybrid Poplar Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Hybrid poplar management considerations
I22A: Glyndon-----	75	Lime content Potential for ground-water contamination Wind erosion
Borup-----	10	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Augsburg-----	5	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Ulen-----	5	Lime content Limited available water capacity Potential for ground-water contamination Wind erosion
Wheatville-----	3	Lime content Potential for ground-water contamination Wind erosion
Flaming-----	2	Limited available water capacity Potential for ground-water contamination Wind erosion
I23A: Glyndon-----	75	Lime content Potential for ground-water contamination Wind erosion
Borup-----	10	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Augsburg-----	5	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Ulen-----	5	Lime content Limited available water capacity Potential for ground-water contamination Wind erosion
Wheatville-----	3	Lime content Potential for ground-water contamination Wind erosion
Flaming-----	2	Limited available water capacity Potential for ground-water contamination Wind erosion

Table 11.--Hybrid Poplar Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Hybrid poplar management considerations
I24A:		
Grimstad-----	70	Lime content Potential for ground-water contamination Wind erosion
Strathcona-----	12	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Foldahl-----	5	Limited available water capacity Potential for ground-water contamination Wind erosion
Hamerly-----	5	Lime content Potential for ground-water contamination Wind erosion
Foxhome-----	2	Lime content Limited available water capacity Potential for ground-water contamination Wind erosion
Karlsruhe-----	2	Lime content Limited available water capacity Potential for ground-water contamination Wind erosion
Mavie-----	2	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Ulen-----	2	Lime content Limited available water capacity Potential for ground-water contamination Wind erosion
I25A:		
Hamar-----	75	Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wind erosion
Garborg-----	10	Limited available water capacity Potential for ground-water contamination Wind erosion
Rosewood-----	7	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wind erosion
Venlo-----	3	High content of organic matter Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion

Table 11.--Hybrid Poplar Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Hybrid poplar management considerations
I25A: Flaming-----	2	Limited available water capacity Potential for ground-water contamination Wind erosion
Hangaard-----	2	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Kratka-----	1	Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I26A: Hamerly-----	75	Lime content Potential for ground-water contamination Wind erosion
Vallers-----	12	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Foxhome-----	3	Lime content Limited available water capacity Potential for ground-water contamination Wind erosion
Grimstad-----	3	Lime content Potential for ground-water contamination Wind erosion
Hamerly, very cobbly-----	3	Lime content Potential for ground-water contamination Wind erosion
Strathcona-----	3	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Roliss, depression-----	1	High content of organic matter Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
I27A: Hamre-----	80	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion

Table 11.--Hybrid Poplar Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Hybrid poplar management considerations
I27A:		
Northwood-----	5	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Roliss-----	5	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Smiley-----	5	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Cathro-----	3	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Kratka-----	2	Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I28A:		
Hangaard-----	75	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Hamar-----	7	Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wind erosion
Syrene-----	7	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Karlsruhe-----	3	Lime content Limited available water capacity Potential for ground-water contamination Wind erosion
Rosewood-----	3	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wind erosion

Table 11.--Hybrid Poplar Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Hybrid poplar management considerations
I28A: Strandquist-----	3	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Deerwood-----	2	High content of organic matter Lime content Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I29A: Hattie-----	75	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Restricted permeability
Clearwater-----	12	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Restricted permeability Wet soil moisture status
Reis-----	6	Lime content Limited available water capacity Potential for ground-water contamination Restricted permeability Wet soil moisture status
Hattie, very cobbly-----	5	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Restricted permeability
Hilaire-----	2	Limited available water capacity Potential for ground-water contamination Wind erosion
I29D: Hattie-----	85	Slope Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Restricted permeability Water erosion
Clearwater-----	6	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Restricted permeability Wet soil moisture status

Table 11.--Hybrid Poplar Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Hybrid poplar management considerations
I29D: Hattie, level-----	5	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Restricted permeability
Boyerlake-----	4	Slope Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Restricted permeability Water erosion
I30A: Hedman-----	85	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Fram-----	5	Lime content Potential for ground-water contamination Wind erosion
Strathcona-----	5	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Haug-----	3	High content of organic matter Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Strandquist-----	2	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I31A: Hedman-----	50	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Fram-----	40	Lime content Potential for ground-water contamination Wind erosion
Strathcona-----	5	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion

Table 11.--Hybrid Poplar Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Hybrid poplar management considerations
I31A: Haug-----	3	High content of organic matter Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Strandquist-----	2	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I32A: Hilaire-----	75	Limited available water capacity Potential for ground-water contamination Wind erosion
Espelie-----	12	Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Huot-----	5	Lime content Limited available water capacity Potential for ground-water contamination Wind erosion
Flaming-----	2	Limited available water capacity Potential for ground-water contamination Wind erosion
Foxlake-----	2	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Restricted permeability Wet soil moisture status Wind erosion
Wheatville-----	2	Lime content Potential for ground-water contamination Wind erosion
Thiefriever-----	1	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Wyandotte-----	1	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion

Table 11.--Hybrid Poplar Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Hybrid poplar management considerations
I33A: Hilaire-----	75	Limited available water capacity Potential for ground-water contamination Wind erosion
Espelie-----	12	Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Huot-----	5	Lime content Limited available water capacity Potential for ground-water contamination Wind erosion
Flaming-----	2	Limited available water capacity Potential for ground-water contamination Wind erosion
Foxlake-----	2	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Restricted permeability Wet soil moisture status Wind erosion
Wheatville-----	2	Lime content Potential for ground-water contamination Wind erosion
Thiefriever-----	1	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Wyandotte-----	1	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I34A: Huot-----	75	Lime content Limited available water capacity Potential for ground-water contamination Wind erosion
Thiefriever-----	12	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Hilaire-----	5	Limited available water capacity Potential for ground-water contamination Wind erosion

Table 11.--Hybrid Poplar Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Hybrid poplar management considerations
I34A: Flaming-----	3	Limited available water capacity Potential for ground-water contamination Wind erosion
Foxlake-----	3	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Restricted permeability Wet soil moisture status Wind erosion
Ulen-----	2	Lime content Limited available water capacity Potential for ground-water contamination Wind erosion
I35A: Karlsruhe-----	70	Lime content Limited available water capacity Potential for ground-water contamination Wind erosion
Syrene-----	10	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Ulen-----	10	Lime content Limited available water capacity Potential for ground-water contamination Wind erosion
Radium-----	5	Limited available water capacity Potential for ground-water contamination Wind erosion
Rosewood-----	3	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wind erosion
Sandberg-----	2	Slope Lime content Limited available water capacity Potential for ground-water contamination Wind erosion
I36A: Kittson-----	70	Lime content Potential for ground-water contamination
Roliss-----	12	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion

Table 11.--Hybrid Poplar Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Hybrid poplar management considerations
I36A: Hamerly-----	5	Lime content Potential for ground-water contamination Wind erosion
Kratka-----	5	Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Grimstad-----	3	Lime content Potential for ground-water contamination Wind erosion
Strandquist-----	3	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Foxhome-----	2	Lime content Limited available water capacity Potential for ground-water contamination Wind erosion
I37A: Kratka, depressional-----	45	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Strathcona, depressional-----	45	High content of organic matter Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Northwood-----	5	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Kratka-----	2	Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Strathcona-----	2	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Roliss-----	1	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion

Table 11.--Hybrid Poplar Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Hybrid poplar management considerations
I38A: Kratka-----	70	Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Smiley-----	7	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Foldahl-----	5	Limited available water capacity Potential for ground-water contamination Wind erosion
Kratka, very cobbly-----	5	Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Strathcona-----	5	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Kratka, depressiona-----	3	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Strandquist-----	3	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Linveldt-----	2	Lime content Limited available water capacity Potential for ground-water contamination Wind erosion
I39A: Linveldt-----	65	Lime content Limited available water capacity Potential for ground-water contamination Wind erosion
Kratka-----	14	Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Reiner-----	10	Lime content Potential for ground-water contamination Wind erosion
Smiley-----	5	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status

Table 11.--Hybrid Poplar Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Hybrid poplar management considerations
I39A: Eckvoll-----	3	Limited available water capacity Potential for ground-water contamination Wind erosion
Foldahl-----	2	Limited available water capacity Potential for ground-water contamination Wind erosion
Pelan-----	1	Lime content Limited available water capacity Potential for ground-water contamination Wind erosion
I40B: Maddock-----	85	Slope Limited available water capacity Potential for ground-water contamination Wind erosion
Flaming-----	5	Limited available water capacity Potential for ground-water contamination Wind erosion
Sandberg-----	5	Slope Lime content Limited available water capacity Potential for ground-water contamination Wind erosion
Halverson-----	3	Slope Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wind erosion
Hamar-----	2	Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wind erosion
I40F: Maddock-----	90	Slope Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Water erosion Wind erosion
Flaming-----	5	Limited available water capacity Potential for ground-water contamination Wind erosion
Sandberg-----	5	Slope Lime content Limited available water capacity Potential for ground-water contamination Wind erosion

Table 11.--Hybrid Poplar Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Hybrid poplar management considerations
I41A: Markey-----	80	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Deerwood-----	12	High content of organic matter Lime content Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Berner-----	2	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Hamar-----	2	Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wind erosion
Seelyeville-----	2	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Syrene-----	2	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I42A: Markey, ponded-----	85	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Markey-----	5	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion

Table 11.--Hybrid Poplar Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Hybrid poplar management considerations
I42A:		
Deerwood-----	4	High content of organic matter Lime content Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Seelyeville, ponded-----	4	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Hamar-----	1	Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wind erosion
Hangaard-----	1	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I43A:		
Mavie-----	70	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Vallars-----	10	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Strandquist-----	7	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Strathcona-----	5	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Strathcona, depression-----	3	High content of organic matter Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion

Table 11.--Hybrid Poplar Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Hybrid poplar management considerations
I43A: Foxhome-----	2	Lime content Limited available water capacity Potential for ground-water contamination Wind erosion
Karlsruhe-----	2	Lime content Limited available water capacity Potential for ground-water contamination Wind erosion
Grimstad-----	1	Lime content Potential for ground-water contamination Wind erosion
I44A: Newfolden-----	75	Lime content Potential for ground-water contamination Potential for surface-water contamination Restricted permeability
Smiley-----	12	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Boash-----	8	Potential for ground-water contamination Potential for surface-water contamination Restricted permeability Wet soil moisture status
Linveldt-----	4	Lime content Limited available water capacity Potential for ground-water contamination Wind erosion
Hapludolls-----	1	Slope Lime content Potential for surface-water contamination Water erosion
I45A: Northwood-----	75	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Hamre-----	10	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Berner-----	5	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion

Table 11.--Hybrid Poplar Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Hybrid poplar management considerations
I45A:		
Kratka-----	5	Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Strandquist-----	3	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Roliss-----	2	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I46A:		
Pits-----	85	Not applicable
Udipsamments-----	10	Slope Limited available water capacity Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Wind erosion
Radium-----	2	Limited available water capacity Potential for ground-water contamination Wind erosion
Maddock-----	1	Slope Limited available water capacity Potential for ground-water contamination Wind erosion
Marquette-----	1	Slope Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wind erosion
Sandberg-----	1	Slope Lime content Limited available water capacity Potential for ground-water contamination Wind erosion
I47A:		
Poppleton-----	75	Limited available water capacity Potential for ground-water contamination Wind erosion
Flaming-----	12	Limited available water capacity Potential for ground-water contamination Wind erosion
Garborg-----	5	Limited available water capacity Potential for ground-water contamination Wind erosion

Table 11.--Hybrid Poplar Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Hybrid poplar management considerations
I47A: Hamar-----	3	Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wind erosion
Radium-----	2	Limited available water capacity Potential for ground-water contamination Wind erosion
Ulen-----	2	Lime content Limited available water capacity Potential for ground-water contamination Wind erosion
Maddock-----	1	Slope Limited available water capacity Potential for ground-water contamination Wind erosion
I48A: Radium-----	75	Limited available water capacity Potential for ground-water contamination Wind erosion
Sandberg-----	7	Slope Lime content Limited available water capacity Potential for ground-water contamination Wind erosion
Oylen-----	5	Limited available water capacity Potential for ground-water contamination Wind erosion
Flaming-----	4	Limited available water capacity Potential for ground-water contamination Wind erosion
Garborg-----	3	Limited available water capacity Potential for ground-water contamination Wind erosion
Hangaard-----	3	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Hamar-----	2	Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wind erosion
Poppleton-----	1	Limited available water capacity Potential for ground-water contamination Wind erosion

Table 11.--Hybrid Poplar Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Hybrid poplar management considerations
I49A:		
Rauville-----	80	Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Fluvaquents-----	12	Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Water-----	5	Not applicable
Lamoure-----	3	Lime content Potential for ground-water contamination Potential for surface-water contamination Restricted permeability Wet soil moisture status Wind erosion
I50A:		
Reiner-----	70	Lime content Potential for ground-water contamination Wind erosion
Smiley-----	12	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Reiner, very cobbly-----	7	Lime content Potential for ground-water contamination Wind erosion
Linveldt-----	5	Lime content Limited available water capacity Potential for ground-water contamination Wind erosion
Eckvoll-----	3	Limited available water capacity Potential for ground-water contamination Wind erosion
Kratka-----	3	Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I51A:		
Reiner-----	65	Lime content Potential for ground-water contamination Wind erosion
Smiley-----	9	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Reiner fine sandy loam-----	8	Lime content Potential for ground-water contamination Wind erosion

Table 11.--Hybrid Poplar Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Hybrid poplar management considerations
I51A: Linveldt-----	7	Lime content Limited available water capacity Potential for ground-water contamination Wind erosion
Kratka-----	5	Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Eckvoll-----	3	Limited available water capacity Potential for ground-water contamination Wind erosion
Reiner, very cobbly-----	3	Lime content Potential for ground-water contamination Wind erosion
I52A: Reis-----	55	Lime content Limited available water capacity Potential for ground-water contamination Restricted permeability Wet soil moisture status
Clearwater-----	30	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Restricted permeability Wet soil moisture status
Clearwater, very cobbly-----	5	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Restricted permeability Wet soil moisture status
Clearwater, depressiona-----	3	High content of organic matter Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Restricted permeability Wet soil moisture status
Espelie-----	3	Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Hattie-----	3	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Restricted permeability

Table 11.--Hybrid Poplar Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Hybrid poplar management considerations
I52A: Wyandotte-----	1	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I53A: Roliss-----	75	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Kratka-----	8	Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Roliss, very cobbly-----	7	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Kittson-----	5	Lime content Potential for ground-water contamination
Roliss, depressional-----	3	High content of organic matter Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Smiley-----	2	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
I54A: Roliss, depressional-----	80	High content of organic matter Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Roliss-----	12	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Hamre-----	5	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion

Table 11.--Hybrid Poplar Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Hybrid poplar management considerations
I54A: Kratka-----	3	Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I55A: Rosewood-----	75	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wind erosion
Ulen-----	10	Lime content Limited available water capacity Potential for ground-water contamination Wind erosion
Hamar-----	6	Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wind erosion
Rosewood, depressional-----	3	High content of organic matter Lime content Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Syrene-----	3	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Karlsruhe-----	1	Lime content Limited available water capacity Potential for ground-water contamination Wind erosion
Strathcona-----	1	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Thiefriever-----	1	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I56A: Rosewood-----	50	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wind erosion

Table 11.--Hybrid Poplar Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Hybrid poplar management considerations
I56A: Venlo-----	40	High content of organic matter Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Deerwood-----	3	High content of organic matter Lime content Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Syrene-----	3	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Ulen-----	2	Lime content Limited available water capacity Potential for ground-water contamination Wind erosion
Strathcona-----	1	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Thiefriever-----	1	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I57B: Sandberg-----	50	Slope Lime content Limited available water capacity Potential for ground-water contamination Wind erosion
Radium-----	25	Limited available water capacity Potential for ground-water contamination Wind erosion
Sioux-----	8	Lime content Limited available water capacity Potential for ground-water contamination Wind erosion
Oylen-----	7	Limited available water capacity Potential for ground-water contamination Wind erosion

Table 11.--Hybrid Poplar Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Hybrid poplar management considerations
I57B: Flaming-----	5	Limited available water capacity Potential for ground-water contamination Wind erosion
Garborg-----	5	Limited available water capacity Potential for ground-water contamination Wind erosion
I58A: Seelyeville-----	90	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Cathro-----	3	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Dora-----	3	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Markey-----	3	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Berner-----	1	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I59A: Smiley-----	65	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Smiley, very cobbly-----	10	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Kratka-----	9	Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion

Table 11.--Hybrid Poplar Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Hybrid poplar management considerations
I59A:		
Roliss-----	5	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Reiner-----	4	Lime content Potential for ground-water contamination Wind erosion
Linveltdt-----	3	Lime content Limited available water capacity Potential for ground-water contamination Wind erosion
Smiley, depressiona-----	3	High content of organic matter Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Strandquist-----	1	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I60A:		
Smiley, depressiona-----	80	High content of organic matter Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Smiley-----	10	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Hamre-----	5	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Kratka-----	5	Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I61A:		
Strandquist-----	70	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion

Table 11.--Hybrid Poplar Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Hybrid poplar management considerations
I61A: Mavie-----	8	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Roliss-----	7	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Kratka-----	5	Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Foxhome-----	4	Lime content Limited available water capacity Potential for ground-water contamination Wind erosion
Hangaard-----	3	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Northwood-----	3	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I62A: Syrene-----	70	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Rosewood-----	11	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wind erosion
Hangaard-----	5	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion

Table 11.--Hybrid Poplar Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Hybrid poplar management considerations
I62A:		
Karlsruhe-----	4	Lime content Limited available water capacity Potential for ground-water contamination Wind erosion
Deerwood-----	3	High content of organic matter Lime content Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Hamar-----	3	Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wind erosion
Strandquist-----	2	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Radium-----	1	Limited available water capacity Potential for ground-water contamination Wind erosion
Wyandotte-----	1	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I63A:		
Thiefriever-----	70	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Espelie-----	10	Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Foxlake-----	7	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Restricted permeability Wet soil moisture status Wind erosion
Huot-----	5	Lime content Limited available water capacity Potential for ground-water contamination Wind erosion

Table 11.--Hybrid Poplar Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Hybrid poplar management considerations
I63A: Clearwater, depressiona-----	3	High content of organic matter Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Restricted permeability Wet soil moisture status
Rosewood-----	3	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wind erosion
Ulen-----	1	Lime content Limited available water capacity Potential for ground-water contamination Wind erosion
Wyandotte-----	1	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I64A: Ulen-----	70	Lime content Limited available water capacity Potential for ground-water contamination Wind erosion
Rosewood-----	10	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wind erosion
Flaming-----	8	Limited available water capacity Potential for ground-water contamination Wind erosion
Karlsruhe-----	5	Lime content Limited available water capacity Potential for ground-water contamination Wind erosion
Radium-----	3	Limited available water capacity Potential for ground-water contamination Wind erosion
Strathcona-----	2	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Thiefriever-----	2	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion

Table 11.--Hybrid Poplar Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Hybrid poplar management considerations
I65A:		
Ulen-----	70	Lime content Limited available water capacity Potential for ground-water contamination Wind erosion
Rosewood-----	10	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wind erosion
Flaming-----	6	Limited available water capacity Potential for ground-water contamination Wind erosion
Poppleton-----	4	Limited available water capacity Potential for ground-water contamination Wind erosion
Karlsruhe-----	3	Lime content Limited available water capacity Potential for ground-water contamination Wind erosion
Radium-----	3	Limited available water capacity Potential for ground-water contamination Wind erosion
Strathcona-----	2	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Thiefriever-----	2	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I66A:		
Vallars-----	75	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Vallars, very cobbly-----	7	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Hamerly-----	6	Lime content Potential for ground-water contamination Wind erosion
Grimstad-----	3	Lime content Potential for ground-water contamination Wind erosion

Table 11.--Hybrid Poplar Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Hybrid poplar management considerations
I66A: Mavie-----	3	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Roliss, depressiona-----	3	High content of organic matter Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Strathcona-----	3	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I67A: Wheatville-----	70	Lime content Potential for ground-water contamination Wind erosion
Augsburg-----	13	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Glyndon-----	8	Lime content Potential for ground-water contamination Wind erosion
Foxlake-----	5	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Restricted permeability Wet soil moisture status Wind erosion
Hilaire-----	2	Limited available water capacity Potential for ground-water contamination Wind erosion
Ulen-----	2	Lime content Limited available water capacity Potential for ground-water contamination Wind erosion
I68A: Wheatville-----	70	Lime content Potential for ground-water contamination Wind erosion
Augsburg-----	13	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion

Table 11.--Hybrid Poplar Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Hybrid poplar management considerations
I68A: Glyndon-----	8	Lime content Potential for ground-water contamination Wind erosion
Foxlake-----	5	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Restricted permeability Wet soil moisture status Wind erosion
Hilaire-----	2	Limited available water capacity Potential for ground-water contamination Wind erosion
Ulen-----	2	Lime content Limited available water capacity Potential for ground-water contamination Wind erosion
I69A: Wyandotte-----	65	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Foxlake-----	10	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Restricted permeability Wet soil moisture status Wind erosion
Espelie-----	8	Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Clearwater, depressional----	5	High content of organic matter Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Restricted permeability Wet soil moisture status
Thiefriever-----	5	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Karlsruhe-----	4	Lime content Limited available water capacity Potential for ground-water contamination Wind erosion

Table 11.--Hybrid Poplar Management Considerations--Continued

Map symbol and soil name	Pct. of map unit	Hybrid poplar management considerations
I69A: Syrene-----	3	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
I70A: Strathcona-----	70	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Kratka-----	10	Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Roliss-----	6	Lime content Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Grimstad-----	5	Lime content Potential for ground-water contamination Wind erosion
Mavie-----	3	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Rosewood-----	3	Lime content Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wind erosion
Strathcona, depression-----	3	High content of organic matter Lime content Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
M-W: Miscellaneous water-----	100	Not applicable
W: Water-----	100	Not applicable

Table 12.--Forest Land Harvest Equipment Considerations

(Only the map units that have soils commonly used for forest production are listed.  
See text for a description of the considerations listed in this table)

Map symbol and soil name	Pct. of map unit	Forest land harvest equipment considerations
<b>B200A:</b>		
Garnes-----	70	Susceptible to rutting and wheel slippage Poor traction (loose sandy material)
Chilgren-----	13	Wetness Susceptible to rutting and wheel slippage
Eckvoll-----	5	Poor traction (loose sandy material)
Garnes, very stony-----	5	Susceptible to rutting and wheel slippage Poor traction (loose sandy material)
Grygla-----	4	Wetness Poor traction (loose sandy material)
Pelan-----	3	Susceptible to rutting and wheel slippage Poor traction (loose sandy material)
<b>B201A:</b>		
Chilgren-----	75	Wetness Susceptible to rutting and wheel slippage
Garnes-----	9	Susceptible to rutting and wheel slippage Poor traction (loose sandy material)
Grygla-----	5	Wetness Poor traction (loose sandy material)
Grygla, depression-----	5	Wetness Poor traction (loose sandy material)
Hamre-----	5	Wetness Susceptible to rutting and wheel slippage
Pelan-----	1	Susceptible to rutting and wheel slippage Poor traction (loose sandy material)
<b>B202A:</b>		
Cathro-----	80	Wetness Susceptible to rutting and wheel slippage
Hamre-----	8	Wetness Susceptible to rutting and wheel slippage
Chilgren-----	3	Wetness Susceptible to rutting and wheel slippage
Northwood-----	3	Wetness Susceptible to rutting and wheel slippage Poor traction (loose sandy material)
Berner-----	2	Wetness Susceptible to rutting and wheel slippage
Grygla-----	2	Wetness Poor traction (loose sandy material)
Seelyeville-----	2	Wetness Susceptible to rutting and wheel slippage

Table 12.--Forest Land Harvest Equipment Considerations--Continued

Map symbol and soil name	Pct. of map unit	Forest land harvest equipment considerations
B203A:		
Northwood-----	75	Wetness Susceptible to rutting and wheel slippage Poor traction (loose sandy material)
Hamre-----	10	Wetness Susceptible to rutting and wheel slippage
Grygla-----	7	Wetness Poor traction (loose sandy material)
Berner-----	5	Wetness Susceptible to rutting and wheel slippage
Chilgren-----	3	Wetness Susceptible to rutting and wheel slippage
B204A:		
Roliss-----	75	Wetness Susceptible to rutting and wheel slippage
Grygla-----	8	Wetness Poor traction (loose sandy material)
Chilgren-----	5	Wetness Susceptible to rutting and wheel slippage
Garnes-----	5	Susceptible to rutting and wheel slippage Poor traction (loose sandy material)
Roliss, depressiona-----	5	Wetness Susceptible to rutting and wheel slippage
Hamre-----	2	Wetness Susceptible to rutting and wheel slippage
B205A:		
Berner-----	80	Wetness Susceptible to rutting and wheel slippage
Northwood-----	7	Wetness Susceptible to rutting and wheel slippage Poor traction (loose sandy material)
Grygla-----	5	Wetness Poor traction (loose sandy material)
Cathro-----	3	Wetness Susceptible to rutting and wheel slippage
Hamre-----	3	Wetness Susceptible to rutting and wheel slippage
Seelyeville-----	2	Wetness Susceptible to rutting and wheel slippage
B206A:		
Hamre-----	80	Wetness Susceptible to rutting and wheel slippage
Chilgren-----	8	Wetness Susceptible to rutting and wheel slippage

Table 12.--Forest Land Harvest Equipment Considerations--Continued

Map symbol and soil name	Pct. of map unit	Forest land harvest equipment considerations
E206A: Northwood-----	5	Wetness Susceptible to rutting and wheel slippage Poor traction (loose sandy material)
Cathro-----	3	Wetness Susceptible to rutting and wheel slippage
Grygla-----	2	Wetness Poor traction (loose sandy material)
Roliss-----	2	Wetness Susceptible to rutting and wheel slippage

Table 13.--Forest Haul Road Considerations

(Only the map units that have soils commonly used for forest production are listed.  
See text for a description of the considerations listed in this table)

Map symbol and soil name	Pct. of map unit	Forest haul road considerations
B200A:		
Garnes-----	70	Low bearing strength
Chilgren-----	13	Wetness Low bearing strength
Eckvoll-----	5	No major considerations
Garnes, very stony-----	5	Low bearing strength
Grygla-----	4	Wetness
Pelan-----	3	Low bearing strength
B201A:		
Chilgren-----	75	Wetness Low bearing strength
Garnes-----	9	Low bearing strength
Grygla-----	5	Wetness
Grygla, depressional-----	5	Wetness
Hamre-----	5	Wetness Low bearing strength
Pelan-----	1	Low bearing strength
B202A:		
Cathro-----	80	Wetness Low bearing strength
Hamre-----	8	Wetness Low bearing strength
Chilgren-----	3	Wetness Low bearing strength
Northwood-----	3	Wetness Low bearing strength
Berner-----	2	Wetness Low bearing strength
Grygla-----	2	Wetness
Seelyeville-----	2	Wetness Low bearing strength
B203A:		
Northwood-----	75	Wetness Low bearing strength
Hamre-----	10	Wetness Low bearing strength
Grygla-----	7	Wetness

Table 13.--Forest Haul Road Considerations--Continued

Map symbol and soil name	Pct. of map unit	Forest haul road considerations
B203A:		
Berner-----	5	Wetness Low bearing strength
Chilgren-----	3	Wetness Low bearing strength
B204A:		
Roliss-----	75	Wetness Low bearing strength
Grygla-----	8	Wetness
Chilgren-----	5	Wetness Low bearing strength
Garnes-----	5	Low bearing strength
Roliss, depressional-----	5	Wetness Low bearing strength
Hamre-----	2	Wetness Low bearing strength
B205A:		
Berner-----	80	Wetness Low bearing strength
Northwood-----	7	Wetness Low bearing strength
Grygla-----	5	Wetness
Cathro-----	3	Wetness Low bearing strength
Hamre-----	3	Wetness Low bearing strength
Seelyeville-----	2	Wetness Low bearing strength
B206A:		
Hamre-----	80	Wetness Low bearing strength
Chilgren-----	8	Wetness Low bearing strength
Northwood-----	5	Wetness Low bearing strength
Cathro-----	3	Wetness Low bearing strength
Grygla-----	2	Wetness
Roliss-----	2	Wetness Low bearing strength

Table 14.--Forest Log Landing Considerations

(Only the map units that have soils commonly used for forest production are listed.  
See text for a description of the considerations listed in this table)

Map symbol and soil name	Pct. of map unit	Forest log landing considerations
B200A:		
Garnes-----	70	Susceptible to rutting and wheel slippage
Chilgren-----	13	Wetness Susceptible to rutting and wheel slippage
Eckvoll-----	5	No major considerations
Garnes, very stony-----	5	Susceptible to rutting and wheel slippage
Grygla-----	4	Wetness
Pelan-----	3	Susceptible to rutting and wheel slippage
B201A:		
Chilgren-----	75	Wetness Susceptible to rutting and wheel slippage
Garnes-----	9	Susceptible to rutting and wheel slippage
Grygla-----	5	Wetness
Grygla, depressiona-----	5	Wetness
Hamre-----	5	Wetness Susceptible to rutting and wheel slippage
Pelan-----	1	Susceptible to rutting and wheel slippage
B202A:		
Cathro-----	80	Wetness Susceptible to rutting and wheel slippage
Hamre-----	8	Wetness Susceptible to rutting and wheel slippage
Chilgren-----	3	Wetness Susceptible to rutting and wheel slippage
Northwood-----	3	Wetness Susceptible to rutting and wheel slippage
Berner-----	2	Wetness Susceptible to rutting and wheel slippage
Grygla-----	2	Wetness
Seelyeville-----	2	Wetness Susceptible to rutting and wheel slippage
B203A:		
Northwood-----	75	Wetness Susceptible to rutting and wheel slippage
Hamre-----	10	Wetness Susceptible to rutting and wheel slippage
Grygla-----	7	Wetness

Table 14.--Forest Log Landing Considerations--Continued

Map symbol and soil name	Pct. of map unit	Forest log landing considerations
B203A:		
Berner-----	5	Wetness Susceptible to rutting and wheel slippage
Chilgren-----	3	Wetness Susceptible to rutting and wheel slippage
B204A:		
Roliss-----	75	Wetness Susceptible to rutting and wheel slippage
Grygla-----	8	Wetness
Chilgren-----	5	Wetness Susceptible to rutting and wheel slippage
Garnes-----	5	Susceptible to rutting and wheel slippage
Roliss, depressiona-----	5	Wetness Susceptible to rutting and wheel slippage
Hamre-----	2	Wetness Susceptible to rutting and wheel slippage
B205A:		
Berner-----	80	Wetness Susceptible to rutting and wheel slippage
Northwood-----	7	Wetness Susceptible to rutting and wheel slippage
Grygla-----	5	Wetness
Cathro-----	3	Wetness Susceptible to rutting and wheel slippage
Hamre-----	3	Wetness Susceptible to rutting and wheel slippage
Seelyeville-----	2	Wetness Susceptible to rutting and wheel slippage
B206A:		
Hamre-----	80	Wetness Susceptible to rutting and wheel slippage
Chilgren-----	8	Wetness Susceptible to rutting and wheel slippage
Northwood-----	5	Wetness Susceptible to rutting and wheel slippage
Cathro-----	3	Wetness Susceptible to rutting and wheel slippage
Grygla-----	2	Wetness
Roliss-----	2	Wetness Susceptible to rutting and wheel slippage

Table 15.--Forest Land Site Preparation and Planting Considerations

(Only the map units that have soils commonly used for forest production are listed.  
See text for a description of the considerations listed in this table)

Map symbol and soil name	Pct. of map unit	Forest land site preparation and planting considerations
<b>B200A:</b>		
Garnes-----	70	No major considerations
Chilgren-----	13	Wetness
Eckvoll-----	5	No major considerations
Garnes, very stony-----	5	Surface stones Cobbly surface
Grygla-----	4	Wetness
Pelan-----	3	No major considerations
<b>B201A:</b>		
Chilgren-----	75	Wetness
Garnes-----	9	No major considerations
Grygla-----	5	Wetness
Grygla, depressional-----	5	Wetness
Hamre-----	5	Wetness
Pelan-----	1	No major considerations
<b>B202A:</b>		
Cathro-----	80	Wetness
Hamre-----	8	Wetness
Chilgren-----	3	Wetness
Northwood-----	3	Wetness
Berner-----	2	Wetness
Grygla-----	2	Wetness
Seelyeville-----	2	Wetness
<b>B203A:</b>		
Northwood-----	75	Wetness
Hamre-----	10	Wetness
Grygla-----	7	Wetness
Berner-----	5	Wetness
Chilgren-----	3	Wetness
<b>B204A:</b>		
Roliss-----	75	Wetness
Grygla-----	8	Wetness
Chilgren-----	5	Wetness

Table 15.--Forest Land Site Preparation and Planting Considerations--Continued

Map symbol and soil name	Pct. of map unit	Forest land site preparation and planting considerations
<b>B204A:</b>		
Garnes-----	5	No major considerations
Roliss, depressional-----	5	Wetness
Hamre-----	2	Wetness
<b>B205A:</b>		
Bernier-----	80	Wetness
Northwood-----	7	Wetness
Grygla-----	5	Wetness
Cathro-----	3	Wetness
Hamre-----	3	Wetness
Seelyeville-----	2	Wetness
<b>B206A:</b>		
Hamre-----	80	Wetness
Chilgren-----	8	Wetness
Northwood-----	5	Wetness
Cathro-----	3	Wetness
Grygla-----	2	Wetness
Roliss-----	2	Wetness

Table 16.--Forest Productivity

(Only the map units that have soils commonly used for forest production are listed. See text for an explanation of terms used in this table)

Map symbol and soil name	Pct. of map unit	Potential productivity			Trees to manage
		Common trees	Site index	Volume of wood fiber cu ft/ac	
<b>B200A:</b>					
Garnes-----	70	Balsam fir-----	65	129	Bur oak, eastern
		Bur oak-----	60	43	white pine, green
		Paper birch-----	65	72	ash, red pine,
		Quaking aspen-----	70	86	white spruce
		Red pine-----	60	100	
		White spruce-----	60	114	
Chilgren-----	13	Balsam fir-----	60	114	Black ash, black
		Black ash-----	50	29	spruce, white
		Paper birch-----	60	72	spruce
		Quaking aspen-----	65	72	
		White spruce-----	55	100	
Eckvoll-----	5	Balsam fir-----	60	114	Bur oak, eastern
		Bur oak-----	55	43	white pine, red
		Paper birch-----	60	72	pine, white spruce
		Quaking aspen-----	65	71	
		Red pine-----	65	115	
		White spruce-----	60	114	
Garnes, very stony-----	5	Balsam fir-----	65	129	Bur oak, eastern
		Bur oak-----	60	43	white pine, green
		Paper birch-----	65	72	ash, red pine,
		Quaking aspen-----	70	86	white spruce
		Red pine-----	60	100	
		White spruce-----	60	114	
Grygla-----	4	Balsam fir-----	60	114	Black ash, black
		Paper birch-----	60	72	spruce, white
		Quaking aspen-----	65	72	spruce
		White spruce-----	60	114	
Pelan-----	3	Bur oak-----	50	29	Bur oak, red pine
		Quaking aspen-----	55	57	
		Red pine-----	60	100	
<b>B201A:</b>					
Chilgren-----	75	Balsam fir-----	60	114	Black ash, black
		Black ash-----	50	29	spruce, white
		Paper birch-----	60	72	spruce
		Quaking aspen-----	65	72	
		White spruce-----	55	100	
Garnes-----	9	Balsam fir-----	65	129	Bur oak, eastern
		Bur oak-----	60	43	white pine, green
		Paper birch-----	65	72	ash, red pine,
		Quaking aspen-----	70	86	white spruce
		Red pine-----	60	100	
		White spruce-----	60	114	
Grygla-----	5	Balsam fir-----	60	114	Black ash, black
		Paper birch-----	60	72	spruce, white
		Quaking aspen-----	65	72	spruce
		White spruce-----	60	114	

Table 16.--Forest Productivity--Continued

Map symbol and soil name	Pct. of map unit	Potential productivity			Trees to manage
		Common trees	Site index	Volume of wood fiber	
		cu ft/ac			
<b>B201A:</b>					
Grygla, depressional----	5	Black ash-----	40	14	Black ash, black spruce
		Black spruce-----	35	43	
		Quaking aspen-----	40	29	
Hamre-----	5	---	---	---	---
Pelan-----	1	Bur oak-----	50	29	Bur oak, red pine
		Quaking aspen-----	55	57	
		Red pine-----	60	100	
<b>B202A:</b>					
Cathro-----	80	---	---	---	---
Hamre-----	8	---	---	---	---
Chilgren-----	3	Balsam fir-----	60	114	Black ash, black spruce, white spruce
		Black ash-----	50	29	
		Paper birch-----	60	72	
		Quaking aspen-----	65	72	
		White spruce-----	55	100	
Northwood-----	3	---	---	---	---
Berner-----	2	---	---	---	---
Grygla-----	2	Balsam fir-----	60	114	Black ash, black spruce, white spruce
		Paper birch-----	60	72	
		Quaking aspen-----	65	72	
		White spruce-----	60	114	
Seelyeville-----	2	---	---	---	---
<b>B203A:</b>					
Northwood-----	75	---	---	---	---
Hamre-----	10	---	---	---	---
Grygla-----	7	Balsam fir-----	60	114	Black ash, black spruce, white spruce
		Paper birch-----	60	72	
		Quaking aspen-----	65	72	
		White spruce-----	60	114	
Berner-----	5	---	---	---	---
Chilgren-----	3	Balsam fir-----	60	114	Black ash, black spruce, white spruce
		Black ash-----	50	29	
		Paper birch-----	60	72	
		Quaking aspen-----	65	72	
		White spruce-----	55	100	
<b>B204A:</b>					
Roliss-----	75	---	---	---	---
Grygla-----	8	Balsam fir-----	60	114	Black ash, black spruce, white spruce
		Paper birch-----	60	72	
		Quaking aspen-----	65	72	
		White spruce-----	60	114	

Table 16.--Forest Productivity--Continued

Map symbol and soil name	Pct. of map unit	Potential productivity			Trees to manage
		Common trees	Site index	Volume of wood fiber cu ft/ac	
<b>B204A:</b>					
Chilgren-----	5	Balsam fir-----	60	114	Black ash, black spruce, white spruce
		Black ash-----	50	29	
		Paper birch-----	60	72	
		Quaking aspen-----	65	72	
		White spruce-----	55	100	
Garnes-----	5	Balsam fir-----	65	129	Bur oak, eastern white pine, green ash, red pine, white spruce
		Bur oak-----	60	43	
		Paper birch-----	65	72	
		Quaking aspen-----	70	86	
		Red pine-----	60	100	
		White spruce-----	60	114	
Roliss, depressiona-----	5	---	---	---	---
Hamre-----	2	---	---	---	---
<b>B205A:</b>					
Berner-----	80	---	---	---	---
Northwood-----	7	---	---	---	---
Grygla-----	5	Balsam fir-----	60	114	Black ash, black spruce, white spruce
		Paper birch-----	60	72	
		Quaking aspen-----	65	72	
		White spruce-----	60	114	
Cathro-----	3	---	---	---	---
Hamre-----	3	---	---	---	---
Seelyeville-----	2	---	---	---	---
<b>B206A:</b>					
Hamre-----	80	---	---	---	---
Chilgren-----	8	Balsam fir-----	60	114	Black ash, black spruce, white spruce
		Black ash-----	50	29	
		Paper birch-----	60	72	
		Quaking aspen-----	65	72	
		White spruce-----	55	100	
Northwood-----	5	---	---	---	---
Cathro-----	3	---	---	---	---
Grygla-----	2	Balsam fir-----	60	114	Black ash, black spruce, white spruce
		Paper birch-----	60	72	
		Quaking aspen-----	65	72	
		White spruce-----	60	114	
Roliss-----	2	---	---	---	---

Table 17a.--Recreation

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. "Not rated" indicates that data are not available or that no rating is applicable. See text for further explanation of ratings in this table)

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>E109A:</b>							
Bowstring-----	45	Very limited Depth to saturated zone Flooding Ponding Content of organic matter	1.00 1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Content of organic matter Flooding	1.00 1.00 1.00 0.60	Very limited Depth to saturated zone Content of organic matter Flooding Ponding	1.00 1.00 1.00 1.00
Fluvaquents-----	40	Very limited Depth to saturated zone Flooding Ponding	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Flooding	1.00 1.00 0.60	Very limited Depth to saturated zone Flooding Ponding	1.00 1.00 1.00
Hapludalfs-----	5	Very limited Flooding Slope Depth to saturated zone	1.00 1.00 0.01	Very limited Slope	1.00	Very limited Slope Depth to saturated zone	1.00 0.01
Seelyeville-----	5	Very limited Depth to saturated zone Flooding Ponding	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Flooding	1.00 1.00 0.60	Very limited Depth to saturated zone Flooding Ponding	1.00 1.00 1.00
Water-----	5	Not rated		Not rated		Not rated	
<b>B200A:</b>							
Garnes-----	70	Somewhat limited Depth to saturated zone	0.01	Not limited		Somewhat limited Depth to saturated zone	0.01
Chilgren-----	13	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Eckvoll-----	5	Somewhat limited Depth to saturated zone	0.01	Not limited		Somewhat limited Depth to saturated zone	0.01
Garnes, very stony--	5	Somewhat limited Too stony Depth to saturated zone	0.04 0.01	Somewhat limited Too stony	0.04	Somewhat limited Slope Too stony Content of large stones Depth to saturated zone	0.12 0.04 0.01 0.01

Table 17a.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>B200A:</b>							
Grygla-----	4	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.12	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.12	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.12
Pelan-----	3	Somewhat limited Depth to saturated zone	0.01	Not limited		Somewhat limited Depth to saturated zone	0.01
<b>B201A:</b>							
Chilgren-----	75	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Garnes-----	9	Somewhat limited Depth to saturated zone	0.01	Not limited		Somewhat limited Depth to saturated zone	0.01
Grygla-----	5	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.12	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.12	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.12
Grygla, depressional	5	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.12	Very limited Ponding Depth to saturated zone Too sandy	1.00 1.00 0.12	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.12
Hamre-----	5	Very limited Depth to saturated zone Ponding Content of organic matter	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00	Very limited Depth to saturated zone Content of organic matter Ponding	1.00 1.00 1.00
Pelan-----	1	Somewhat limited Depth to saturated zone	0.01	Not limited		Somewhat limited Depth to saturated zone	0.01
<b>B202A:</b>							
Cathro-----	80	Very limited Depth to saturated zone Ponding Content of organic matter	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00	Very limited Depth to saturated zone Content of organic matter Ponding	1.00 1.00 1.00
Hamre-----	8	Very limited Depth to saturated zone Ponding Content of organic matter	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00	Very limited Depth to saturated zone Content of organic matter Ponding	1.00 1.00 1.00

Table 17a.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>B202A:</b>							
Chilgren-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Northwood-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Berner-----	2	Very limited Depth to saturated zone Ponding Content of organic matter	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00	Very limited Depth to saturated zone Content of organic matter Ponding	1.00 1.00 1.00
Grygla-----	2	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.12	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.12	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.12
Seelyeville-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
<b>B203A:</b>							
Northwood-----	75	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Hamre-----	10	Very limited Depth to saturated zone Ponding Content of organic matter	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00	Very limited Depth to saturated zone Content of organic matter Ponding	1.00 1.00 1.00
Grygla-----	7	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.12	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.12	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.12
Berner-----	5	Very limited Depth to saturated zone Ponding Content of organic matter	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00	Very limited Depth to saturated zone Content of organic matter Ponding	1.00 1.00 1.00
Chilgren-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 17a.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>B204A:</b>							
Roliss-----	75	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Grygla-----	8	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.12	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.12	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.12
Chilgren-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Garnes-----	5	Somewhat limited Depth to saturated zone	0.01	Not limited		Somewhat limited Depth to saturated zone	0.01
Roliss, depressional	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Hamre-----	2	Very limited Depth to saturated zone Ponding Content of organic matter	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00	Very limited Depth to saturated zone Content of organic matter Ponding	1.00 1.00 1.00
<b>B205A:</b>							
Berner-----	80	Very limited Depth to saturated zone Ponding Content of organic matter	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00	Very limited Depth to saturated zone Content of organic matter Ponding	1.00 1.00 1.00
Northwood-----	7	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Grygla-----	5	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.12	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.12	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.12
Cathro-----	3	Very limited Depth to saturated zone Ponding Content of organic matter	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00	Very limited Depth to saturated zone Content of organic matter Ponding	1.00 1.00 1.00

Table 17a.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>B205A:</b>							
Hamre-----	3	Very limited Depth to saturated zone Ponding Content of organic matter	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00	Very limited Depth to saturated zone Content of organic matter Ponding	1.00 1.00 1.00 1.00
Seelyeville-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
<b>B206A:</b>							
Hamre-----	80	Very limited Depth to saturated zone Ponding Content of organic matter	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00	Very limited Depth to saturated zone Content of organic matter Ponding	1.00 1.00 1.00
Chilgren-----	8	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Northwood-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Cathro-----	3	Very limited Depth to saturated zone Ponding Content of organic matter	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00	Very limited Depth to saturated zone Content of organic matter Ponding	1.00 1.00 1.00
Grygla-----	2	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.12	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.12	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.12
Roliss-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
<b>I1A:</b>							
Augsburg-----	75	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96

Table 17a.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I1A:							
Borup-----	10	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Foxlake-----	5	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96
Augsburg, depressional-----	3	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Ponding Depth to saturated zone Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96
Wheatville-----	3	Very limited Depth to saturated zone Restricted permeability	1.00 0.96	Somewhat limited Restricted permeability Depth to saturated zone	0.96 0.90	Very limited Depth to saturated zone Restricted permeability	1.00 0.96
Glyndon-----	2	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Espelie-----	1	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96
Hattie-----	1	Very limited Too clayey Restricted permeability Depth to saturated zone	1.00 0.96 0.20	Very limited Too clayey Restricted permeability Depth to saturated zone	1.00 0.96 0.10	Very limited Too clayey Restricted permeability Depth to saturated zone	1.00 0.96 0.20
I2A:							
Augsburg-----	75	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96
Borup-----	10	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 17a.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>I2A:</b>							
Foxlake-----	5	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96
Augsburg, depressional-----	3	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Ponding Depth to saturated zone Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96
Wheatville-----	3	Very limited Depth to saturated zone Restricted permeability	1.00 0.96	Somewhat limited Restricted permeability Depth to saturated zone	0.96 0.90	Very limited Depth to saturated zone Restricted permeability	1.00 0.96
Glyndon-----	2	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Espelie-----	1	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96
Hattie-----	1	Very limited Too clayey Restricted permeability Depth to saturated zone	1.00 0.96 0.20	Very limited Too clayey Restricted permeability Depth to saturated zone	1.00 0.96 0.10	Very limited Too clayey Restricted permeability Depth to saturated zone	1.00 0.96 0.20
<b>I3A:</b>							
Berner-----	80	Not rated		Not rated		Not rated	
Northwood-----	7	Not rated		Not rated		Not rated	
Kratka-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Hamre-----	3	Not rated		Not rated		Not rated	
Strathcona-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Seelyeville-----	2	Not rated		Not rated		Not rated	

Table 17a.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I4A: Berner-----	30	Not rated		Not rated		Not rated	
Rosewood, depressional-----	30	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Strathcona, depressional-----	30	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Rosewood-----	4	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Deerwood-----	2	Not rated		Not rated		Not rated	
Mavie-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Strathcona-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
I5A: Borup-----	75	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Glyndon-----	9	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Rosewood-----	8	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Augsburg-----	5	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96
Augsburg, depressional-----	3	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Ponding Depth to saturated zone Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96

Table 17a.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I6A:							
Borup-----	75	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Glyndon-----	9	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Rosewood-----	8	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Augsburg-----	5	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96
Augsburg, depressional-----	3	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Ponding Depth to saturated zone Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96
I7A:							
Bowstring-----	45	Not rated		Not rated		Not rated	
Fluvaquents-----	45	Very limited Depth to saturated zone Flooding Ponding	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Flooding	1.00 1.00 0.60	Very limited Depth to saturated zone Flooding Ponding	1.00 1.00 1.00
Hapludolls-----	5	Very limited Flooding Slope	1.00 0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
Water-----	5	Not rated		Not rated		Not rated	
I8A:							
Cathro-----	80	Not rated		Not rated		Not rated	
Hamre-----	8	Not rated		Not rated		Not rated	
Northwood-----	3	Not rated		Not rated		Not rated	
Roliss-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Berner-----	2	Not rated		Not rated		Not rated	

Table 17a.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I8A:							
Kratka-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Seelyeville-----	2	Not rated		Not rated		Not rated	
I9A:							
Clearwater-----	80	Very limited Depth to saturated zone Too clayey Ponding Restricted permeability	1.00 1.00 1.00 0.96	Very limited Depth to saturated zone Too clayey Ponding Restricted permeability	1.00 1.00 1.00 0.96	Very limited Depth to saturated zone Too clayey Ponding Restricted permeability	1.00 1.00 1.00 0.96
Clearwater, very cobble-----	5	Very limited Depth to saturated zone Too clayey Ponding Restricted permeability	1.00 1.00 1.00 0.96	Very limited Depth to saturated zone Too clayey Ponding Restricted permeability	1.00 1.00 1.00 0.96	Very limited Depth to saturated zone Too clayey Ponding Restricted permeability	1.00 1.00 1.00 0.96
Reis-----	5	Very limited Depth to saturated zone Too clayey Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Too clayey Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Too clayey Restricted permeability	1.00 1.00 0.96
Clearwater, depressional-----	3	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Ponding Depth to saturated zone Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96
Espelie-----	3	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96
Foxlake-----	2	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96

Table 17a.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I9A:							
Hattie-----	1	Very limited Too clayey Restricted permeability Depth to saturated zone	1.00 0.96 0.20	Very limited Too clayey Restricted permeability Depth to saturated zone	1.00 0.96 0.10	Very limited Too clayey Restricted permeability Depth to saturated zone	1.00 0.96 0.20
Huot-----	1	Somewhat limited Restricted permeability Depth to saturated zone	0.96 0.01	Somewhat limited Restricted permeability	0.96	Somewhat limited Restricted permeability Gravel content Depth to saturated zone	0.96 0.06 0.01
I10A:							
Clearwater, depressional-----	85	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Ponding Depth to saturated zone Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96
Clearwater-----	9	Very limited Depth to saturated zone Too clayey Ponding Restricted permeability	1.00 1.00 1.00 0.96	Very limited Depth to saturated zone Too clayey Ponding Restricted permeability	1.00 1.00 1.00 0.96	Very limited Depth to saturated zone Too clayey Ponding Restricted permeability	1.00 1.00 1.00 0.96
Augsburg, depressional-----	3	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Ponding Depth to saturated zone Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96
Reis-----	2	Very limited Depth to saturated zone Too clayey Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Too clayey Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Too clayey Restricted permeability	1.00 1.00 0.96
Espelie-----	1	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96
I11A:							
Deerwood-----	85	Not rated		Not rated		Not rated	

Table 17a.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I11A: Rosewood-----	6	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Markey-----	3	Not rated		Not rated		Not rated	
Strathcona-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Syrene-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Venlo-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
I12A: Eckvoll-----	70	Somewhat limited Too sandy Depth to saturated zone	0.31 0.01	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy Depth to saturated zone	0.31 0.01
Kratka-----	8	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Smiley-----	7	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Linveltdt-----	5	Somewhat limited Depth to saturated zone	0.01	Not limited		Somewhat limited Depth to saturated zone	0.01
Reiner-----	5	Somewhat limited Depth to saturated zone	0.01	Not limited		Somewhat limited Depth to saturated zone	0.01
Foldahl-----	2	Somewhat limited Too sandy Depth to saturated zone	0.31 0.01	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy Depth to saturated zone	0.31 0.01
Pelan-----	2	Somewhat limited Depth to saturated zone	0.01	Not limited		Somewhat limited Depth to saturated zone	0.01
Poppleton-----	1	Very limited Too sandy Depth to saturated zone	1.00 0.01	Very limited Too sandy	1.00	Very limited Too sandy Depth to saturated zone	1.00 0.01

Table 17a.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I13A:							
Espelie-----	75	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96
Foxlake-----	8	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96
Hilaire-----	7	Somewhat limited Restricted permeability Depth to saturated zone	0.96 0.01	Somewhat limited Restricted permeability	0.96	Somewhat limited Restricted permeability Depth to saturated zone	0.96 0.01
Clearwater, depressional-----	5	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Ponding Depth to saturated zone Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96
Thiefriver-----	5	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96
I14B:							
Fairdale-----	85	Very limited Flooding Depth to saturated zone	1.00 0.01	Not limited		Somewhat limited Flooding Slope Depth to saturated zone	0.60 0.50 0.01
Fluvaquents-----	6	Very limited Depth to saturated zone Flooding Ponding	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Flooding	1.00 1.00 0.60	Very limited Depth to saturated zone Flooding Ponding	1.00 1.00 1.00
Hapludolls-----	5	Very limited Flooding Slope	1.00 0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
Hapludalfs-----	2	Very limited Flooding Slope Depth to saturated zone	1.00 1.00 0.01	Very limited Slope	1.00	Very limited Slope Depth to saturated zone	1.00 0.01
Zell-----	2	Somewhat limited Slope	0.84	Somewhat limited Slope	0.84	Very limited Slope	1.00

Table 17a.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I14D:							
Fairdale-----	85	Very limited Flooding Slope Depth to saturated zone	1.00 0.37 0.01	Somewhat limited Slope	0.37	Very limited Slope Flooding Depth to saturated zone	1.00 0.60 0.01
Fluvaquents-----	6	Very limited Depth to saturated zone Flooding Ponding	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Flooding	1.00 1.00 0.60	Very limited Depth to saturated zone Flooding Ponding	1.00 1.00 1.00
Hapludolls-----	4	Very limited Flooding Slope	1.00 0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
Zell-----	3	Somewhat limited Slope	0.84	Somewhat limited Slope	0.84	Very limited Slope	1.00
Hapludalfs-----	2	Very limited Flooding Slope Depth to saturated zone	1.00 1.00 0.01	Very limited Slope	1.00	Very limited Slope Depth to saturated zone	1.00 0.01
I15A:							
Flaming-----	70	Somewhat limited Too sandy Depth to saturated zone	0.31 0.01	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy Depth to saturated zone	0.31 0.01
Garborg-----	10	Very limited Depth to saturated zone Too sandy	0.99 0.31	Somewhat limited Depth to saturated zone Too sandy	0.78 0.31	Somewhat limited Depth to saturated zone Too sandy	0.99 0.31
Hamar-----	5	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.31	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.31	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.31
Ulen-----	5	Somewhat limited Depth to saturated zone	0.44	Somewhat limited Depth to saturated zone	0.22	Somewhat limited Depth to saturated zone	0.44
Poppleton-----	3	Very limited Too sandy Depth to saturated zone	1.00 0.01	Very limited Too sandy	1.00	Very limited Too sandy Depth to saturated zone	1.00 0.01
Sandberg-----	3	Somewhat limited Too sandy Gravel content	0.30 0.01	Somewhat limited Too sandy Gravel content	0.30 0.01	Very limited Gravel content Slope Too sandy	1.00 0.50 0.30

Table 17a.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>I15A:</b>							
Foldahl-----	2	Somewhat limited Too sandy Depth to saturated zone	0.31 0.01	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy Depth to saturated zone	0.31 0.01
Radium-----	2	Somewhat limited Too sandy	0.36	Somewhat limited Too sandy	0.36	Somewhat limited Too sandy	0.36
<b>I16F:</b>							
Fluvaquents-----	55	Very limited Depth to saturated zone Flooding Ponding	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Flooding	1.00 1.00 0.60	Very limited Depth to saturated zone Flooding Ponding	1.00 1.00 1.00
Hapludolls-----	25	Very limited Flooding Slope	1.00 0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
Hapludalfs-----	7	Very limited Flooding Slope Depth to saturated zone	1.00 1.00 0.01	Very limited Slope	1.00	Very limited Slope Depth to saturated zone	1.00 0.01
Fairdale-----	5	Very limited Flooding Slope Depth to saturated zone	1.00 0.37 0.01	Somewhat limited Slope	0.37	Very limited Slope Flooding Depth to saturated zone	1.00 0.60 0.01
Water-----	5	Not rated		Not rated		Not rated	
Bowstring-----	2	Not rated		Not rated		Not rated	
Rauville-----	1	Very limited Depth to saturated zone Flooding Ponding	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Flooding	1.00 1.00 0.60	Very limited Depth to saturated zone Flooding Ponding	1.00 1.00 1.00
<b>I17A:</b>							
Foldahl-----	75	Somewhat limited Depth to saturated zone	0.01	Not limited		Somewhat limited Depth to saturated zone	0.01
Kratka-----	10	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Roliss-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 17a.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I17A:							
Flaming-----	4	Somewhat limited Too sandy Depth to saturated zone	0.31 0.01	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy Depth to saturated zone	0.31 0.01
Grimstad-----	2	Very limited Depth to saturated zone	0.99	Somewhat limited Depth to saturated zone	0.78	Somewhat limited Depth to saturated zone	0.99
Linveldt-----	2	Somewhat limited Depth to saturated zone	0.01	Not limited		Somewhat limited Depth to saturated zone	0.01
Eckvoll-----	1	Somewhat limited Too sandy Depth to saturated zone	0.31 0.01	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy Depth to saturated zone	0.31 0.01
Strathcona-----	1	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
I18A:							
Foldahl-----	75	Somewhat limited Too sandy Depth to saturated zone	0.31 0.01	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy Depth to saturated zone	0.31 0.01
Kratka-----	10	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Roliss-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Flaming-----	4	Somewhat limited Too sandy Depth to saturated zone	0.31 0.01	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy Depth to saturated zone	0.31 0.01
Grimstad-----	2	Very limited Depth to saturated zone	0.99	Somewhat limited Depth to saturated zone	0.78	Somewhat limited Depth to saturated zone	0.99
Linveldt-----	2	Somewhat limited Depth to saturated zone	0.01	Not limited		Somewhat limited Depth to saturated zone	0.01
Eckvoll-----	1	Somewhat limited Too sandy Depth to saturated zone	0.31 0.01	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy Depth to saturated zone	0.31 0.01

Table 17a.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I18A: Strathcona-----	1	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
I19A: Foxhome-----	65	Somewhat limited Depth to saturated zone	0.01	Not limited		Somewhat limited Depth to saturated zone	0.01
Kittson-----	10	Somewhat limited Depth to saturated zone	0.01	Not limited		Somewhat limited Depth to saturated zone	0.01
Strandquist-----	10	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Foldahl-----	5	Somewhat limited Depth to saturated zone	0.01	Not limited		Somewhat limited Depth to saturated zone	0.01
Grimstad-----	5	Very limited Depth to saturated zone	0.99	Somewhat limited Depth to saturated zone	0.78	Somewhat limited Depth to saturated zone	0.99
Roliss-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Mavie-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
I20A: Foxlake-----	75	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96
Clearwater-----	5	Very limited Depth to saturated zone Too clayey Ponding Restricted permeability	1.00 1.00 1.00 0.96	Very limited Depth to saturated zone Too clayey Ponding Restricted permeability	1.00 1.00 1.00 0.96	Very limited Depth to saturated zone Too clayey Ponding Restricted permeability	1.00 1.00 1.00 0.96
Foxlake, very cobbly	5	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96

Table 17a.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I20A: Augsburg-----	3	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96
Clearwater, depressional-----	3	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Ponding Depth to saturated zone Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96
Espelie-----	3	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96
Hilaire-----	2	Somewhat limited Restricted permeability Depth to saturated zone	0.96 0.01	Somewhat limited Restricted permeability	0.96	Somewhat limited Restricted permeability Depth to saturated zone	0.96 0.01
Reis-----	2	Very limited Depth to saturated zone Too clayey Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Too clayey Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Too clayey Restricted permeability	1.00 1.00 0.96
Wheatville-----	2	Very limited Depth to saturated zone Restricted permeability	1.00 0.96	Somewhat limited Restricted permeability Depth to saturated zone	0.96 0.90	Very limited Depth to saturated zone Restricted permeability	1.00 0.96
I21A: Fram-----	85	Somewhat limited Depth to saturated zone	0.01	Not limited		Somewhat limited Depth to saturated zone	0.01
Hedman-----	12	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Strathcona-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Foxhome-----	1	Somewhat limited Depth to saturated zone	0.01	Not limited		Somewhat limited Depth to saturated zone	0.01

Table 17a.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I22A: Glyndon-----	75	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Borup-----	10	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Augsburg-----	5	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96
Ulen-----	5	Somewhat limited Depth to saturated zone	0.44	Somewhat limited Depth to saturated zone	0.22	Somewhat limited Depth to saturated zone	0.44
Wheatville-----	3	Very limited Depth to saturated zone Restricted permeability	1.00 0.96	Somewhat limited Restricted permeability Depth to saturated zone	0.96 0.90	Very limited Depth to saturated zone Restricted permeability	1.00 0.96
Flaming-----	2	Somewhat limited Too sandy Depth to saturated zone	0.31 0.01	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy Depth to saturated zone	0.31 0.01
I23A: Glyndon-----	75	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Borup-----	10	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Augsburg-----	5	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96
Ulen-----	5	Somewhat limited Depth to saturated zone Too sandy	0.44 0.31	Somewhat limited Too sandy Depth to saturated zone	0.31 0.22	Somewhat limited Depth to saturated zone Too sandy	0.44 0.31
Wheatville-----	3	Very limited Depth to saturated zone Restricted permeability	1.00 0.96	Somewhat limited Restricted permeability Depth to saturated zone	0.96 0.90	Very limited Depth to saturated zone Restricted permeability	1.00 0.96

Table 17a.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I23A: Flaming-----	2	Somewhat limited Too sandy Depth to saturated zone	0.31 0.01	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy Depth to saturated zone	0.31 0.01
I24A: Grimstad-----	70	Very limited Depth to saturated zone	0.99	Somewhat limited Depth to saturated zone	0.78	Somewhat limited Depth to saturated zone	0.99
Strathcona-----	12	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Foldahl-----	5	Somewhat limited Depth to saturated zone	0.01	Not limited		Somewhat limited Depth to saturated zone	0.01
Hamerly-----	5	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.90	Very limited Depth to saturated zone	1.00
Foxhome-----	2	Somewhat limited Depth to saturated zone	0.01	Not limited		Somewhat limited Depth to saturated zone	0.01
Karlsruhe-----	2	Somewhat limited Depth to saturated zone	0.44	Somewhat limited Depth to saturated zone	0.22	Somewhat limited Depth to saturated zone	0.44
Mavie-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Ulen-----	2	Somewhat limited Depth to saturated zone	0.44	Somewhat limited Depth to saturated zone	0.22	Somewhat limited Depth to saturated zone	0.44
I25A: Hamar-----	75	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.31	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.31	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.31
Garborg-----	10	Very limited Depth to saturated zone Too sandy	0.99 0.31	Somewhat limited Depth to saturated zone Too sandy	0.78 0.31	Somewhat limited Depth to saturated zone Too sandy	0.99 0.31
Rosewood-----	7	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 17a.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>I25A:</b>							
Venlo-----	3	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Ponding Depth to saturated zone	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00
Flaming-----	2	Somewhat limited Too sandy Depth to saturated zone	0.31  0.01	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy Depth to saturated zone	0.31  0.01
Hangaard-----	2	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00
Kratka-----	1	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00
<b>I26A:</b>							
Hamerly-----	75	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.90	Very limited Depth to saturated zone	1.00
Vallers-----	12	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00
Foxhome-----	3	Somewhat limited Depth to saturated zone	0.01	Not limited		Somewhat limited Depth to saturated zone	0.01
Grimstad-----	3	Very limited Depth to saturated zone	0.99	Somewhat limited Depth to saturated zone	0.78	Somewhat limited Depth to saturated zone	0.99
Hamerly, very cobbly	3	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.90	Very limited Depth to saturated zone	1.00
Strathcona-----	3	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00
Roliss, depressional	1	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Ponding Depth to saturated zone	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00
<b>I27A:</b>							
Hamre-----	80	Not rated		Not rated		Not rated	
Northwood-----	5	Not rated		Not rated		Not rated	

Table 17a.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I27A:							
Roliss-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Smiley-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Cathro-----	3	Not rated		Not rated		Not rated	
Kratka-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
I28A:							
Hangaard-----	75	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Hamar-----	7	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.31	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.31	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.31
Syrene-----	7	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Karlsruhe-----	3	Somewhat limited Depth to saturated zone	0.44	Somewhat limited Depth to saturated zone	0.22	Somewhat limited Depth to saturated zone	0.44
Rosewood-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Strandquist-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Deerwood-----	2	Not rated		Not rated		Not rated	
I29A:							
Hattie-----	75	Very limited Too clayey Restricted permeability Depth to saturated zone	1.00 0.96 0.20	Very limited Too clayey Restricted permeability Depth to saturated zone	1.00 0.96 0.10	Very limited Too clayey Restricted permeability Depth to saturated zone	1.00 0.96 0.20

Table 17a.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I29A:							
Clearwater-----	12	Very limited Depth to saturated zone Too clayey Ponding Restricted permeability	1.00 1.00 1.00 0.96	Very limited Depth to saturated zone Too clayey Ponding Restricted permeability	1.00 1.00 1.00 0.96	Very limited Depth to saturated zone Too clayey Ponding Restricted permeability	1.00 1.00 1.00 0.96
Reis-----	6	Very limited Depth to saturated zone Too clayey Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Too clayey Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Too clayey Restricted permeability	1.00 1.00 0.96
Hattie, very cobbly	5	Very limited Too clayey Restricted permeability Depth to saturated zone	1.00 0.96 0.20	Very limited Too clayey Restricted permeability Depth to saturated zone	1.00 0.96 0.10	Very limited Too clayey Restricted permeability Depth to saturated zone	1.00 0.96 0.20
Hilaire-----	2	Somewhat limited Restricted permeability Depth to saturated zone	0.96 0.01	Somewhat limited Restricted permeability	0.96	Somewhat limited Restricted permeability Depth to saturated zone	0.96 0.01
I29D:							
Hattie-----	85	Very limited Too clayey Restricted permeability Slope Depth to saturated zone	1.00 0.96 0.63 0.20	Very limited Too clayey Restricted permeability Slope Depth to saturated zone	1.00 0.96 0.63 0.10	Very limited Slope Too clayey Restricted permeability Depth to saturated zone	1.00 1.00 0.96 0.20
Clearwater-----	6	Very limited Depth to saturated zone Too clayey Ponding Restricted permeability	1.00 1.00 1.00 0.96	Very limited Depth to saturated zone Too clayey Ponding Restricted permeability	1.00 1.00 1.00 0.96	Very limited Depth to saturated zone Too clayey Ponding Restricted permeability	1.00 1.00 1.00 0.96
Hattie, level-----	5	Very limited Too clayey Restricted permeability Depth to saturated zone	1.00 0.96 0.20	Very limited Too clayey Restricted permeability Depth to saturated zone	1.00 0.96 0.10	Very limited Too clayey Restricted permeability Depth to saturated zone	1.00 0.96 0.20
Boyerlake-----	4	Very limited Too clayey Restricted permeability Depth to saturated zone	1.00 0.96 0.20	Very limited Too clayey Restricted permeability Depth to saturated zone	1.00 0.96 0.10	Very limited Too clayey Restricted permeability Slope Depth to saturated zone	1.00 0.96 0.88 0.20

Table 17a.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I30A:							
Hedman-----	85	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Fram-----	5	Somewhat limited Depth to saturated zone	0.01	Not limited		Somewhat limited Depth to saturated zone	0.01
Strathcona-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Haug-----	3	Not rated		Not rated		Not rated	
Strandquist-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
I31A:							
Hedman-----	50	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Fram-----	40	Somewhat limited Depth to saturated zone	0.01	Not limited		Somewhat limited Depth to saturated zone	0.01
Strathcona-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Haug-----	3	Not rated		Not rated		Not rated	
Strandquist-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
I32A:							
Hilaire-----	75	Somewhat limited Restricted permeability Depth to saturated zone	0.96 0.01	Somewhat limited Restricted permeability	0.96	Somewhat limited Restricted permeability Depth to saturated zone	0.96 0.01
Espelie-----	12	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96

Table 17a.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>I32A:</b>							
Huot-----	5	Somewhat limited Restricted permeability Depth to saturated zone	0.96  0.01	Somewhat limited Restricted permeability	0.96	Somewhat limited Restricted permeability Gravel content Depth to saturated zone	0.96  0.06 0.01
Flaming-----	2	Somewhat limited Too sandy Depth to saturated zone	0.31 0.01	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy Depth to saturated zone	0.31 0.01
Foxlake-----	2	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96
Wheatville-----	2	Very limited Depth to saturated zone Restricted permeability	1.00 0.96	Somewhat limited Restricted permeability Depth to saturated zone	0.96 0.90	Very limited Depth to saturated zone Restricted permeability	1.00 0.96
Thiefriever-----	1	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96
Wyandotte-----	1	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96
<b>I33A:</b>							
Hilaire-----	75	Somewhat limited Restricted permeability Too sandy Depth to saturated zone	0.96 0.31 0.01	Somewhat limited Restricted permeability Too sandy	0.96 0.31	Somewhat limited Restricted permeability Too sandy Depth to saturated zone	0.96 0.31 0.01
Espelie-----	12	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96

Table 17a.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I33A:							
Huot-----	5	Somewhat limited Restricted permeability Depth to saturated zone	0.96  0.01	Somewhat limited Restricted permeability	0.96	Somewhat limited Restricted permeability Gravel content Depth to saturated zone	0.96  0.06 0.01
Flaming-----	2	Somewhat limited Too sandy Depth to saturated zone	0.31 0.01	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy Depth to saturated zone	0.31 0.01
Foxlake-----	2	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96
Wheatville-----	2	Very limited Depth to saturated zone Restricted permeability	1.00 0.96	Somewhat limited Restricted permeability Depth to saturated zone	0.96 0.90	Very limited Depth to saturated zone Restricted permeability	1.00 0.96
Thiefriver-----	1	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96
Wyandotte-----	1	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96
I34A:							
Huot-----	75	Somewhat limited Restricted permeability Depth to saturated zone	0.96  0.01	Somewhat limited Restricted permeability	0.96	Somewhat limited Restricted permeability Gravel content Depth to saturated zone	0.96  0.06 0.01
Thiefriver-----	12	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96
Hilaire-----	5	Somewhat limited Restricted permeability Depth to saturated zone	0.96  0.01	Somewhat limited Restricted permeability	0.96	Somewhat limited Restricted permeability Depth to saturated zone	0.96  0.01

Table 17a.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>I34A:</b>							
Flaming-----	3	Somewhat limited Too sandy Depth to saturated zone	0.31 0.01	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy Depth to saturated zone	0.31 0.01
Foxlake-----	3	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96
Ulen-----	2	Somewhat limited Depth to saturated zone	0.44	Somewhat limited Depth to saturated zone	0.22	Somewhat limited Depth to saturated zone	0.44
<b>I35A:</b>							
Karlsruhe-----	70	Somewhat limited Depth to saturated zone	0.44	Somewhat limited Depth to saturated zone	0.22	Somewhat limited Depth to saturated zone	0.44
Syrene-----	10	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Ulen-----	10	Somewhat limited Depth to saturated zone Too sandy	0.44 0.31	Somewhat limited Too sandy Depth to saturated zone	0.31 0.22	Somewhat limited Depth to saturated zone Too sandy	0.44 0.31
Radium-----	5	Somewhat limited Too sandy	0.36	Somewhat limited Too sandy	0.36	Somewhat limited Too sandy	0.36
Rosewood-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Sandberg-----	2	Somewhat limited Too sandy Gravel content	0.30 0.01	Somewhat limited Too sandy Gravel content	0.30 0.01	Very limited Gravel content Slope Too sandy	1.00 0.50 0.30
<b>I36A:</b>							
Kittson-----	70	Somewhat limited Depth to saturated zone	0.01	Not limited		Somewhat limited Depth to saturated zone	0.01
Roliss-----	12	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Hamerly-----	5	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.90	Very limited Depth to saturated zone	1.00

Table 17a.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I36A:							
Kratka-----	5	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00
Grimstad-----	3	Very limited Depth to saturated zone	0.99	Somewhat limited Depth to saturated zone	0.78	Somewhat limited Depth to saturated zone	0.99
Strandquist-----	3	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00
Foxhome-----	2	Somewhat limited Depth to saturated zone	0.01	Not limited		Somewhat limited Depth to saturated zone	0.01
I37A:							
Kratka, depressional	45	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Ponding Depth to saturated zone	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00
Strathcona, depressional-----	45	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Ponding Depth to saturated zone	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00
Northwood-----	5	Not rated		Not rated		Not rated	
Kratka-----	2	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00
Strathcona-----	2	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00
Roliss-----	1	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00
I38A:							
Kratka-----	70	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00
Smiley-----	7	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00

Table 17a.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I38A:							
Foldahl-----	5	Somewhat limited Depth to saturated zone	0.01	Not limited		Somewhat limited Depth to saturated zone	0.01
Kratka, very cobbly	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Strathcona-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Kratka, depressional	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Strandquist-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Linveldt-----	2	Somewhat limited Depth to saturated zone	0.01	Not limited		Somewhat limited Depth to saturated zone	0.01
I39A:							
Linveldt-----	65	Somewhat limited Depth to saturated zone	0.01	Not limited		Somewhat limited Depth to saturated zone	0.01
Kratka-----	14	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Reiner-----	10	Somewhat limited Depth to saturated zone	0.01	Not limited		Somewhat limited Depth to saturated zone	0.01
Smiley-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Eckvoll-----	3	Somewhat limited Too sandy Depth to saturated zone	0.31 0.01	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy Depth to saturated zone	0.31 0.01
Foldahl-----	2	Somewhat limited Depth to saturated zone	0.01	Not limited		Somewhat limited Depth to saturated zone	0.01
Pelan-----	1	Somewhat limited Depth to saturated zone	0.01	Not limited		Somewhat limited Depth to saturated zone	0.01

Table 17a.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>I40B:</b>							
Maddock-----	85	Somewhat limited Too sandy	0.96	Somewhat limited Too sandy	0.96	Somewhat limited Too sandy Slope	0.96 0.50
Flaming-----	5	Somewhat limited Too sandy Depth to saturated zone	0.31 0.01	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy Depth to saturated zone	0.31 0.01
Sandberg-----	5	Somewhat limited Too sandy Gravel content	0.30 0.01	Somewhat limited Too sandy Gravel content	0.30 0.01	Very limited Gravel content Slope Too sandy	1.00 0.50 0.30
Halverson-----	3	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy	0.31	Somewhat limited Slope Too sandy	0.50 0.31
Hamar-----	2	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.31	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.31	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.31
<b>I40F:</b>							
Maddock-----	90	Very limited Slope Too sandy	1.00 0.31	Very limited Slope Too sandy	1.00 0.31	Very limited Slope Too sandy	1.00 0.31
Flaming-----	5	Somewhat limited Too sandy Depth to saturated zone	0.31 0.01	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy Depth to saturated zone	0.31 0.01
Sandberg-----	5	Somewhat limited Too sandy Gravel content	0.30 0.01	Somewhat limited Too sandy Gravel content	0.30 0.01	Very limited Gravel content Slope Too sandy	1.00 0.50 0.30
<b>I41A:</b>							
Markey-----	80	Not rated		Not rated		Not rated	
Deerwood-----	12	Not rated		Not rated		Not rated	
Berner-----	2	Not rated		Not rated		Not rated	
Hamar-----	2	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.31	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.31	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.31
Seelyeville-----	2	Not rated		Not rated		Not rated	
Syrene-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 17a.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I42A:							
Markey, ponded-----	85	Not rated		Not rated		Not rated	
Markey-----	5	Not rated		Not rated		Not rated	
Deerwood-----	4	Not rated		Not rated		Not rated	
Seelyeville, ponded	4	Not rated		Not rated		Not rated	
Hamar-----	1	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Too sandy	0.31	Too sandy	0.31	Too sandy	0.31
Hangaard-----	1	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
I43A:							
Marie-----	70	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
Vallers-----	10	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
Strandquist-----	7	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
Strathcona-----	5	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
Strathcona, depressional-----	3	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Ponding	1.00
Foxhome-----	2	Somewhat limited		Not limited		Somewhat limited	
		Depth to saturated zone	0.01			Depth to saturated zone	0.01
Karlsruhe-----	2	Somewhat limited		Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.44	Depth to saturated zone	0.22	Depth to saturated zone	0.44
Grimstad-----	1	Very limited		Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.99	Depth to saturated zone	0.78	Depth to saturated zone	0.99

Table 17a.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I44A:							
Newfolden-----	75	Somewhat limited Restricted permeability Depth to saturated zone	0.94 0.01	Somewhat limited Restricted permeability	0.94	Somewhat limited Restricted permeability Depth to saturated zone	0.94 0.01
Smiley-----	12	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Boash-----	8	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96
Linveltd-----	4	Somewhat limited Depth to saturated zone	0.01	Not limited		Somewhat limited Depth to saturated zone	0.01
Hapludolls-----	1	Very limited Flooding Slope	1.00 0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
I45A:							
Northwood-----	75	Not rated		Not rated		Not rated	
Hamre-----	10	Not rated		Not rated		Not rated	
Berner-----	5	Not rated		Not rated		Not rated	
Kratka-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Strandquist-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Roliss-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
I46A:							
Pits-----	85	Not rated		Not rated		Not rated	
Udipsamments-----	10	Very limited Too sandy Slope	1.00 1.00	Very limited Too sandy Slope	1.00 1.00	Very limited Too sandy Slope	1.00 1.00
Radium-----	2	Somewhat limited Too sandy	0.36	Somewhat limited Too sandy	0.36	Somewhat limited Too sandy	0.36

Table 17a.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>I46A:</b>							
Maddock-----	1	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy	0.31	Somewhat limited Slope Too sandy	0.50 0.31
Marquette-----	1	Somewhat limited Too sandy	0.36	Somewhat limited Too sandy	0.36	Somewhat limited Slope Too sandy	0.88 0.36
Sandberg-----	1	Somewhat limited Too sandy Gravel content	0.30 0.01	Somewhat limited Too sandy Gravel content	0.30 0.01	Very limited Gravel content Slope Too sandy	1.00 0.50 0.30
<b>I47A:</b>							
Poppleton-----	75	Very limited Too sandy Depth to saturated zone	1.00 0.01	Very limited Too sandy	1.00	Very limited Too sandy Depth to saturated zone	1.00 0.01
Flaming-----	12	Somewhat limited Too sandy Depth to saturated zone	0.31 0.01	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy Depth to saturated zone	0.31 0.01
Garborg-----	5	Very limited Depth to saturated zone Too sandy	0.99 0.31	Somewhat limited Depth to saturated zone Too sandy	0.78 0.31	Somewhat limited Depth to saturated zone Too sandy	0.99 0.31
Hamar-----	3	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.31	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.31	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.31
Radium-----	2	Somewhat limited Too sandy	0.36	Somewhat limited Too sandy	0.36	Somewhat limited Too sandy	0.36
Ulen-----	2	Somewhat limited Depth to saturated zone Too sandy	0.44 0.31	Somewhat limited Too sandy Depth to saturated zone	0.31 0.22	Somewhat limited Depth to saturated zone Too sandy	0.44 0.31
Maddock-----	1	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy	0.31	Somewhat limited Slope Too sandy	0.50 0.31
<b>I48A:</b>							
Radium-----	75	Somewhat limited Too sandy	0.36	Somewhat limited Too sandy	0.36	Somewhat limited Too sandy	0.36
Sandberg-----	7	Somewhat limited Too sandy Gravel content	0.30 0.01	Somewhat limited Too sandy Gravel content	0.30 0.01	Very limited Gravel content Slope Too sandy	1.00 0.50 0.30

Table 17a.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I48A:							
Oylen-----	5	Not limited		Not limited		Not limited	
Flaming-----	4	Somewhat limited Too sandy Depth to saturated zone	0.31 0.01	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy Depth to saturated zone	0.31 0.01
Garborg-----	3	Very limited Depth to saturated zone Too sandy	0.99 0.31	Somewhat limited Depth to saturated zone Too sandy	0.78 0.31	Somewhat limited Depth to saturated zone Too sandy	0.99 0.31
Hangaard-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Hamar-----	2	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.31	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.31	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.31
Poppleton-----	1	Very limited Too sandy Depth to saturated zone	1.00 0.01	Very limited Too sandy	1.00	Very limited Too sandy Depth to saturated zone	1.00 0.01
I49A:							
Rauville-----	80	Very limited Depth to saturated zone Flooding Ponding	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Flooding	1.00 1.00 0.60	Very limited Depth to saturated zone Flooding Ponding	1.00 1.00 1.00
Fluvaquents-----	12	Very limited Depth to saturated zone Flooding Ponding	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Flooding	1.00 1.00 0.60	Very limited Depth to saturated zone Flooding Ponding	1.00 1.00 1.00
Water-----	5	Not rated		Not rated		Not rated	
Lamoure-----	3	Very limited Depth to saturated zone Flooding Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Flooding	1.00 1.00 0.40	Very limited Depth to saturated zone Flooding Ponding	1.00 1.00 1.00
I50A:							
Reiner-----	70	Somewhat limited Depth to saturated zone	0.01	Not limited		Somewhat limited Depth to saturated zone	0.01
Smiley-----	12	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 17a.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I50A: Reiner, very cobbly	7	Somewhat limited Depth to saturated zone	0.01	Not limited		Somewhat limited Depth to saturated zone	0.01
Linveldt-----	5	Somewhat limited Depth to saturated zone	0.01	Not limited		Somewhat limited Depth to saturated zone	0.01
Eckvoll-----	3	Somewhat limited Too sandy Depth to saturated zone	0.31 0.01	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy Depth to saturated zone	0.31 0.01
Kratka-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
I51A: Reiner-----	65	Somewhat limited Too sandy Depth to saturated zone	0.31 0.01	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy Depth to saturated zone	0.31 0.01
Smiley-----	9	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Reiner fine sandy loam-----	8	Somewhat limited Depth to saturated zone	0.01	Not limited		Somewhat limited Depth to saturated zone	0.01
Linveldt-----	7	Somewhat limited Depth to saturated zone	0.01	Not limited		Somewhat limited Depth to saturated zone	0.01
Kratka-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Eckvoll-----	3	Somewhat limited Too sandy Depth to saturated zone	0.31 0.01	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy Depth to saturated zone	0.31 0.01
Reiner, very cobbly	3	Somewhat limited Depth to saturated zone	0.01	Not limited		Somewhat limited Depth to saturated zone	0.01
I52A: Reis-----	55	Very limited Depth to saturated zone Too clayey Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Too clayey Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Too clayey Restricted permeability	1.00 1.00 0.96

Table 17a.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I52A: Clearwater-----	30	Very limited Depth to saturated zone Too clayey Ponding Restricted permeability	1.00 1.00 1.00 0.96	Very limited Depth to saturated zone Too clayey Ponding Restricted permeability	1.00 1.00 1.00 0.96	Very limited Depth to saturated zone Too clayey Ponding Restricted permeability	1.00 1.00 1.00 0.96
Clearwater, very cobble-----	5	Very limited Depth to saturated zone Too clayey Ponding Restricted permeability	1.00 1.00 1.00 0.96	Very limited Depth to saturated zone Too clayey Ponding Restricted permeability	1.00 1.00 1.00 0.96	Very limited Depth to saturated zone Too clayey Ponding Restricted permeability	1.00 1.00 1.00 0.96
Clearwater, depressional-----	3	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Ponding Depth to saturated zone Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96
Espelie-----	3	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96
Hattie-----	3	Very limited Too clayey Restricted permeability Depth to saturated zone	1.00 0.96 0.20	Very limited Too clayey Restricted permeability Depth to saturated zone	1.00 0.96 0.10	Very limited Too clayey Restricted permeability Depth to saturated zone	1.00 0.96 0.20
Wyandotte-----	1	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96
I53A: Roliss-----	75	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Kratka-----	8	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 17a.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I53A: Roliss, very cobbly	7	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Kittson-----	5	Somewhat limited Depth to saturated zone	0.01	Not limited		Somewhat limited Depth to saturated zone	0.01
Roliss, depressional	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Smiley-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
I54A: Roliss, depressional	80	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Roliss-----	12	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Hamre-----	5	Not rated		Not rated		Not rated	
Kratka-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
I55A: Rosewood-----	75	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Ulen-----	10	Somewhat limited Depth to saturated zone	0.44	Somewhat limited Depth to saturated zone	0.22	Somewhat limited Depth to saturated zone	0.44
Hamar-----	6	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.31	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.31	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.31
Rosewood, depressional-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 17a.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I55A:							
Syrene-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Karlsruhe-----	1	Somewhat limited Depth to saturated zone	0.44	Somewhat limited Depth to saturated zone	0.22	Somewhat limited Depth to saturated zone	0.44
Strathcona-----	1	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Thiefriever-----	1	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96
I56A:							
Rosewood-----	50	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Venlo-----	40	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Deerwood-----	3	Not rated		Not rated		Not rated	
Syrene-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Ulen-----	2	Somewhat limited Depth to saturated zone Too sandy	0.44 0.31	Somewhat limited Too sandy Depth to saturated zone	0.31 0.22	Somewhat limited Depth to saturated zone Too sandy	0.44 0.31
Strathcona-----	1	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Thiefriever-----	1	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96

Table 17a.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>I57B:</b>							
Sandberg-----	50	Somewhat limited Too sandy Gravel content	0.30 0.01	Somewhat limited Too sandy Gravel content	0.30 0.01	Very limited Gravel content Slope Too sandy	1.00 0.50 0.30
Radium-----	25	Somewhat limited Too sandy	0.36	Somewhat limited Too sandy	0.36	Somewhat limited Too sandy	0.36
Sioux-----	8	Not limited		Not limited		Not limited	
Oylen-----	7	Not limited		Not limited		Not limited	
Flaming-----	5	Somewhat limited Too sandy Depth to saturated zone	0.31 0.01	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy Depth to saturated zone	0.31 0.01
Garborg-----	5	Very limited Depth to saturated zone Too sandy	0.99 0.31	Somewhat limited Depth to saturated zone Too sandy	0.78 0.31	Somewhat limited Depth to saturated zone Too sandy	0.99 0.31
<b>I58A:</b>							
Seelyeville-----	90	Not rated		Not rated		Not rated	
Cathro-----	3	Not rated		Not rated		Not rated	
Dora-----	3	Not rated		Not rated		Not rated	
Markey-----	3	Not rated		Not rated		Not rated	
Berner-----	1	Not rated		Not rated		Not rated	
<b>I59A:</b>							
Smiley-----	65	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Smiley, very cobbly	10	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Kratka-----	9	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Roliss-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Reiner-----	4	Somewhat limited Depth to saturated zone	0.01	Not limited		Somewhat limited Depth to saturated zone	0.01

Table 17a.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I59A: Linveltdt-----	3	Somewhat limited Depth to saturated zone	0.01	Not limited		Somewhat limited Depth to saturated zone	0.01
Smiley, depressional	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Strandquist-----	1	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
I60A: Smiley, depressional	80	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Smiley-----	10	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Hamre-----	5	Not rated		Not rated		Not rated	
Kratka-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
I61A: Strandquist-----	70	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Mavie-----	8	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Roliss-----	7	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Kratka-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Foxhome-----	4	Somewhat limited Depth to saturated zone	0.01	Not limited		Somewhat limited Depth to saturated zone	0.01

Table 17a.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I61A:							
Hangaard-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Northwood-----	3	Not rated		Not rated		Not rated	
I62A:							
Syrene-----	70	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Rosewood-----	11	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Hangaard-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Karlsruhe-----	4	Somewhat limited Depth to saturated zone	0.44	Somewhat limited Depth to saturated zone	0.22	Somewhat limited Depth to saturated zone	0.44
Deerwood-----	3	Not rated		Not rated		Not rated	
Hamar-----	3	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.31	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.31	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.31
Strandquist-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Radium-----	1	Somewhat limited Too sandy	0.36	Somewhat limited Too sandy	0.36	Somewhat limited Too sandy	0.36
Wyandotte-----	1	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96
I63A:							
Thiefriver-----	70	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96

Table 17a.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I63A:							
Espelie-----	10	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96
Foxlake-----	7	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96
Huot-----	5	Somewhat limited Restricted permeability Depth to saturated zone	0.96 0.01	Somewhat limited Restricted permeability	0.96	Somewhat limited Restricted permeability Gravel content Depth to saturated zone	0.96 0.06 0.01
Clearwater, depressional-----	3	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Ponding Depth to saturated zone Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96
Rosewood-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Ulen-----	1	Somewhat limited Depth to saturated zone	0.44	Somewhat limited Depth to saturated zone	0.22	Somewhat limited Depth to saturated zone	0.44
Wyandotte-----	1	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96
I64A:							
Ulen-----	70	Somewhat limited Depth to saturated zone	0.44	Somewhat limited Depth to saturated zone	0.22	Somewhat limited Depth to saturated zone	0.44
Rosewood-----	10	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 17a.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>I64A:</b>							
Flaming-----	8	Somewhat limited Too sandy Depth to saturated zone	0.31 0.01	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy Depth to saturated zone	0.31 0.01
Karlsruhe-----	5	Somewhat limited Depth to saturated zone	0.44	Somewhat limited Depth to saturated zone	0.22	Somewhat limited Depth to saturated zone	0.44
Radium-----	3	Somewhat limited Too sandy	0.36	Somewhat limited Too sandy	0.36	Somewhat limited Too sandy	0.36
Strathcona-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Thiefriever-----	2	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96
<b>I65A:</b>							
Ulen-----	70	Somewhat limited Depth to saturated zone Too sandy	0.44 0.31	Somewhat limited Too sandy Depth to saturated zone	0.31 0.22	Somewhat limited Depth to saturated zone Too sandy	0.44 0.31
Rosewood-----	10	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Flaming-----	6	Somewhat limited Too sandy Depth to saturated zone	0.31 0.01	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy Depth to saturated zone	0.31 0.01
Poppleton-----	4	Very limited Too sandy Depth to saturated zone	1.00 0.01	Very limited Too sandy	1.00	Very limited Too sandy Depth to saturated zone	1.00 0.01
Karlsruhe-----	3	Somewhat limited Depth to saturated zone	0.44	Somewhat limited Depth to saturated zone	0.22	Somewhat limited Depth to saturated zone	0.44
Radium-----	3	Somewhat limited Too sandy	0.36	Somewhat limited Too sandy	0.36	Somewhat limited Too sandy	0.36
Strathcona-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 17a.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I65A: Thiefriver-----	2	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96
I66A: Vallars-----	75	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Vallars, very cobbly	7	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Hamerly-----	6	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.90	Very limited Depth to saturated zone	1.00
Grimstad-----	3	Very limited Depth to saturated zone	0.99	Somewhat limited Depth to saturated zone	0.78	Somewhat limited Depth to saturated zone	0.99
Mavie-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Roliss, depressional	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Strathcona-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
I67A: Wheatville-----	70	Very limited Depth to saturated zone Restricted permeability	1.00 0.96	Somewhat limited Restricted permeability Depth to saturated zone	0.96 0.90	Very limited Depth to saturated zone Restricted permeability	1.00 0.96
Augsburg-----	13	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96
Glyndon-----	8	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00

Table 17a.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>I67A:</b>							
Foxlake-----	5	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96
Hilaire-----	2	Somewhat limited Restricted permeability Too sandy Depth to saturated zone	0.96 0.31 0.01	Somewhat limited Restricted permeability Too sandy	0.96 0.31	Somewhat limited Restricted permeability Too sandy Depth to saturated zone	0.96 0.31 0.01
Ulen-----	2	Somewhat limited Depth to saturated zone Too sandy	0.44 0.31	Somewhat limited Too sandy Depth to saturated zone	0.31 0.22	Somewhat limited Depth to saturated zone Too sandy	0.44 0.31
<b>I68A:</b>							
Wheatville-----	70	Very limited Depth to saturated zone Restricted permeability	1.00 0.96	Somewhat limited Restricted permeability Depth to saturated zone	0.96 0.90	Very limited Depth to saturated zone Restricted permeability	1.00 0.96
Augsburg-----	13	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96
Glyndon-----	8	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Foxlake-----	5	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96
Hilaire-----	2	Somewhat limited Restricted permeability Too sandy Depth to saturated zone	0.96 0.31 0.01	Somewhat limited Restricted permeability Too sandy	0.96 0.31	Somewhat limited Restricted permeability Too sandy Depth to saturated zone	0.96 0.31 0.01
Ulen-----	2	Somewhat limited Depth to saturated zone Too sandy	0.44 0.31	Somewhat limited Too sandy Depth to saturated zone	0.31 0.22	Somewhat limited Depth to saturated zone Too sandy	0.44 0.31

Table 17a.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I69A: Wyandotte-----	65	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96
Foxlake-----	10	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96
Espelie-----	8	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96
Clearwater, depressional-----	5	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Ponding Depth to saturated zone Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96
Thiefriever-----	5	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96	Very limited Depth to saturated zone Ponding Restricted permeability	1.00 1.00 0.96
Karlsruhe-----	4	Somewhat limited Depth to saturated zone	0.44	Somewhat limited Depth to saturated zone	0.22	Somewhat limited Depth to saturated zone	0.44
Syrene-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
I70A: Strathcona-----	70	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Kratka-----	10	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 17a.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I70A:							
Roliss-----	6	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Grimstad-----	5	Very limited Depth to saturated zone	0.99	Somewhat limited Depth to saturated zone	0.78	Somewhat limited Depth to saturated zone	0.99
Mavie-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Rosewood-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Strathcona, depressional-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
M-W:							
Miscellaneous water	100	Not rated		Not rated		Not rated	
W:							
Water-----	100	Not rated		Not rated		Not rated	

Table 17b.--Recreation

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. "Not rated" indicates that data are not available or that no rating is applicable. See text for further explanation of ratings in this table)

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>E109A:</b>							
Bowstring-----	45	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Content of organic matter	1.00	Content of organic matter	1.00	Flooding	1.00
		Ponding	1.00	Ponding	1.00	Content of organic matter	
		Flooding	0.60	Flooding	0.60	Depth to saturated zone	1.00
Fluvaquents-----	40	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Ponding	1.00	Ponding	1.00	Flooding	1.00
		Flooding	0.60	Flooding	0.60	Depth to saturated zone	1.00
Hapludalfs-----	5	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.44	Slope	1.00
Seelyeville-----	5	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Ponding	1.00	Ponding	1.00	Flooding	1.00
		Flooding	0.60	Flooding	0.60	Depth to saturated zone	1.00
Water-----	5	Not rated		Not rated		Not rated	
<b>E200A:</b>							
Garnes-----	70	Not limited		Not limited		Not limited	
Chilgren-----	13	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
Eckvoll-----	5	Not limited		Not limited		Not limited	
Garnes, very stony--	5	Somewhat limited		Somewhat limited		Somewhat limited	
		Too stony	0.04	Too stony	0.04	Content of large stones	0.01
Grygla-----	4	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Too sandy	0.12	Too sandy	0.12		
Pelan-----	3	Not limited		Not limited		Not limited	
<b>E201A:</b>							
Chilgren-----	75	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00

Table 17b.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>E201A:</b>							
Garnes-----	9	Not limited		Not limited		Not limited	
Grygla-----	5	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Too sandy	0.12	Too sandy	0.12		
Grygla, depressiona	5	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Ponding	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Too sandy	0.12	Too sandy	0.12		
Hamre-----	5	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Content of organic matter	1.00	Content of organic matter	1.00	Content of organic matter	1.00
		Ponding	1.00	Ponding	1.00	Depth to saturated zone	1.00
Pelan-----	1	Not limited		Not limited		Not limited	
<b>E202A:</b>							
Cathro-----	80	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Content of organic matter	1.00	Content of organic matter	1.00	Content of organic matter	1.00
		Ponding	1.00	Ponding	1.00	Depth to saturated zone	1.00
Hamre-----	8	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Content of organic matter	1.00	Content of organic matter	1.00	Content of organic matter	1.00
		Ponding	1.00	Ponding	1.00	Depth to saturated zone	1.00
Chilgren-----	3	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
Northwood-----	3	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Ponding	1.00	Ponding	1.00	Depth to saturated zone	1.00
Berner-----	2	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Content of organic matter	1.00	Content of organic matter	1.00	Content of organic matter	1.00
		Ponding	1.00	Ponding	1.00	Depth to saturated zone	1.00

Table 17b.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>B202A:</b>							
Grygla-----	2	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Too sandy	0.12	Too sandy	0.12		
Seelyeville-----	2	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Ponding	1.00	Ponding	1.00	Depth to saturated zone	1.00
<b>B203A:</b>							
Northwood-----	75	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Ponding	1.00	Ponding	1.00	Depth to saturated zone	1.00
Hamre-----	10	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Content of organic matter	1.00	Content of organic matter	1.00	Content of organic matter	1.00
		Ponding	1.00	Ponding	1.00	Depth to saturated zone	1.00
Grygla-----	7	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Too sandy	0.12	Too sandy	0.12		
Berner-----	5	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Content of organic matter	1.00	Content of organic matter	1.00	Content of organic matter	1.00
		Ponding	1.00	Ponding	1.00	Depth to saturated zone	1.00
Chilgren-----	3	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
<b>B204A:</b>							
Roliss-----	75	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
Grygla-----	8	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Too sandy	0.12	Too sandy	0.12		
Chilgren-----	5	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00

Table 17b.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>E204A:</b>							
Garnes-----	5	Not limited		Not limited		Not limited	
Roliss, depressional	5	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Ponding	1.00	Ponding	1.00	Depth to saturated zone	1.00
Hamre-----	2	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Content of organic matter	1.00	Content of organic matter	1.00	Content of organic matter	1.00
		Ponding	1.00	Ponding	1.00	Depth to saturated zone	1.00
<b>B205A:</b>							
Berner-----	80	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Content of organic matter	1.00	Content of organic matter	1.00	Content of organic matter	1.00
		Ponding	1.00	Ponding	1.00	Depth to saturated zone	1.00
Northwood-----	7	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Ponding	1.00	Ponding	1.00	Depth to saturated zone	1.00
Grygla-----	5	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Too sandy	0.12	Too sandy	0.12		
Cathro-----	3	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Content of organic matter	1.00	Content of organic matter	1.00	Content of organic matter	1.00
		Ponding	1.00	Ponding	1.00	Depth to saturated zone	1.00
Hamre-----	3	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Content of organic matter	1.00	Content of organic matter	1.00	Content of organic matter	1.00
		Ponding	1.00	Ponding	1.00	Depth to saturated zone	1.00
Seelyeville-----	2	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Ponding	1.00	Ponding	1.00	Depth to saturated zone	1.00

Table 17b.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>B206A:</b>							
Hamre-----	80	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Content of organic matter	1.00	Content of organic matter	1.00	Content of organic matter	1.00
		Ponding	1.00	Ponding	1.00	Depth to saturated zone	1.00
Chilgren-----	8	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
Northwood-----	5	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Ponding	1.00	Ponding	1.00	Depth to saturated zone	1.00
Cathro-----	3	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Content of organic matter	1.00	Content of organic matter	1.00	Content of organic matter	1.00
		Ponding	1.00	Ponding	1.00	Depth to saturated zone	1.00
Grygla-----	2	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Too sandy	0.12	Too sandy	0.12		
Roliss-----	2	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
<b>IIA:</b>							
Augsburg-----	75	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
Borup-----	10	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
Foxlake-----	5	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
Augsburg, depressional-----	3	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Ponding	1.00	Ponding	1.00	Depth to saturated zone	1.00

Table 17b.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>I1A:</b>							
Wheatville-----	3	Somewhat limited Depth to saturated zone	0.78	Somewhat limited Depth to saturated zone	0.78	Somewhat limited Depth to saturated zone	0.90
Glyndon-----	2	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Espelie-----	1	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Hattie-----	1	Very limited Too clayey	1.00	Very limited Too clayey	1.00	Very limited Too clayey Depth to saturated zone	1.00 0.10
<b>I2A:</b>							
Augsburg-----	75	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Borup-----	10	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Foxlake-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Augsburg, depressional-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Wheatville-----	3	Somewhat limited Depth to saturated zone	0.78	Somewhat limited Depth to saturated zone	0.78	Somewhat limited Depth to saturated zone	0.90
Glyndon-----	2	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Espelie-----	1	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Hattie-----	1	Very limited Too clayey	1.00	Very limited Too clayey	1.00	Very limited Too clayey Depth to saturated zone	1.00 0.10

Table 17b.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I3A: Berner-----	80	Not rated		Not rated		Very limited Ponding Content of organic matter Depth to saturated zone	1.00 1.00 1.00
Northwood-----	7	Not rated		Not rated		Very limited Ponding Depth to saturated zone	1.00 1.00
Kratka-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00 1.00
Hamre-----	3	Not rated		Not rated		Very limited Ponding Content of organic matter Depth to saturated zone	1.00 1.00 1.00
Strathcona-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00 1.00
Seelyville-----	2	Not rated		Not rated		Very limited Ponding Depth to saturated zone	1.00 1.00
I4A: Berner-----	30	Not rated		Not rated		Very limited Ponding Content of organic matter Depth to saturated zone	1.00 1.00 1.00
Rosewood, depressional-----	30	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Strathcona, depressional-----	30	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Rosewood-----	4	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 17b.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>I4A:</b>							
Deerwood-----	2	Not rated		Not rated		Very limited Ponding	1.00
						Depth to saturated zone	1.00
Mavie-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding Droughty	1.00 1.00 0.01
Strathcona-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
<b>I5A:</b>							
Borup-----	75	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Glyndon-----	9	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Rosewood-----	8	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Augsburg-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Augsburg, depressional-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
<b>I6A:</b>							
Borup-----	75	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Glyndon-----	9	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Rosewood-----	8	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 17b.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I6A: Augsburg-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Augsburg, depressional-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
I7A: Bowstring-----	45	Not rated		Not rated		Very limited Ponding Flooding Content of organic matter Depth to saturated zone	1.00 1.00 1.00 1.00
Fluvaquents-----	45	Very limited Depth to saturated zone Ponding Flooding	1.00 1.00 0.60	Very limited Depth to saturated zone Ponding Flooding	1.00 1.00 0.60	Very limited Ponding Flooding Depth to saturated zone	1.00 1.00 1.00
Hapludolls-----	5	Not limited		Not limited		Somewhat limited Slope	0.63
Water-----	5	Not rated		Not rated		Not rated	
I8A: Cathro-----	80	Not rated		Not rated		Very limited Ponding Content of organic matter Depth to saturated zone	1.00 1.00 1.00
Hamre-----	8	Not rated		Not rated		Very limited Ponding Content of organic matter Depth to saturated zone	1.00 1.00 1.00
Northwood-----	3	Not rated		Not rated		Very limited Ponding Depth to saturated zone	1.00 1.00
Roliss-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 17b.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I8A: Bernier-----	2	Not rated		Not rated		Very limited Ponding Content of organic matter Depth to saturated zone	1.00 1.00 1.00
Kratka-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00 1.00
Seelyeville-----	2	Not rated		Not rated		Very limited Ponding Depth to saturated zone	1.00 1.00
I9A: Clearwater-----	80	Very limited Depth to saturated zone Too clayey Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Too clayey Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Too clayey Ponding	1.00 1.00 1.00 1.00
Clearwater, very cobbly-----	5	Very limited Depth to saturated zone Too clayey Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Too clayey Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Too clayey Ponding	1.00 1.00 1.00 1.00
Reis-----	5	Very limited Depth to saturated zone Too clayey	1.00 1.00	Very limited Depth to saturated zone Too clayey	1.00 1.00	Very limited Depth to saturated zone Too clayey	1.00 1.00 1.00
Clearwater, depressional-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Espelie-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00 1.00
Foxlake-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00 1.00
Hattie-----	1	Very limited Too clayey	1.00	Very limited Too clayey	1.00	Very limited Too clayey Depth to saturated zone	1.00 1.00 0.10
Huot-----	1	Not limited		Not limited		Not limited	

Table 17b.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I10A: Clearwater, depressional-----	85	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Clearwater-----	9	Very limited Depth to saturated zone Too clayey Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Too clayey Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Too clayey Ponding	1.00 1.00 1.00
Augsburg, depressional-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Reis-----	2	Very limited Depth to saturated zone Too clayey	1.00 1.00	Very limited Depth to saturated zone Too clayey	1.00 1.00	Very limited Depth to saturated zone Too clayey	1.00 1.00
Espelie-----	1	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
I11A: Deerwood-----	85	Not rated		Not rated		Very limited Ponding Depth to saturated zone	1.00 1.00
Rosewood-----	6	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Markey-----	3	Not rated		Not rated		Very limited Ponding Content of organic matter Depth to saturated zone	1.00 1.00 1.00
Strathcona-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Syrene-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding Droughty	1.00 1.00 0.30

Table 17b.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I11A: Venlo-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Droughty	1.00 1.00 0.01
I12A: Eckvoll-----	70	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy	0.31	Not limited	
Kratka-----	8	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Smiley-----	7	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Linveltdt-----	5	Not limited		Not limited		Not limited	
Reiner-----	5	Not limited		Not limited		Not limited	
Foldahl-----	2	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy	0.31	Not limited	
Pelan-----	2	Not limited		Not limited		Not limited	
Poppleton-----	1	Very limited Too sandy	1.00	Very limited Too sandy	1.00	Somewhat limited Droughty	0.09
I13A: Espelie-----	75	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Foxlake-----	8	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Hilaire-----	7	Not limited		Not limited		Somewhat limited Droughty	0.01
Clearwater, depressional-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Thiefriver-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 17b.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I14B: Fairdale-----	85	Not limited		Not limited		Somewhat limited Flooding	0.60
Fluvaquents-----	6	Very limited Depth to saturated zone Ponding Flooding	1.00 1.00 0.60	Very limited Depth to saturated zone Ponding Flooding	1.00 1.00 0.60	Very limited Ponding Flooding Depth to saturated zone	1.00 1.00 1.00
Hapludolls-----	5	Not limited		Not limited		Somewhat limited Slope	0.63
Hapludalfs-----	2	Very limited Slope	1.00	Somewhat limited Slope	0.44	Very limited Slope	1.00
Zell-----	2	Not limited		Not limited		Somewhat limited Slope	0.84
I14D: Fairdale-----	85	Not limited		Not limited		Somewhat limited Flooding Slope	0.60 0.37
Fluvaquents-----	6	Very limited Depth to saturated zone Ponding Flooding	1.00 1.00 0.60	Very limited Depth to saturated zone Ponding Flooding	1.00 1.00 0.60	Very limited Ponding Flooding Depth to saturated zone	1.00 1.00 1.00
Hapludolls-----	4	Not limited		Not limited		Somewhat limited Slope	0.63
Zell-----	3	Not limited		Not limited		Somewhat limited Slope	0.84
Hapludalfs-----	2	Very limited Slope	1.00	Somewhat limited Slope	0.44	Very limited Slope	1.00
I15A: Flaming-----	70	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy	0.31	Somewhat limited Droughty	0.15
Garborg-----	10	Somewhat limited Depth to saturated zone Too sandy	0.50 0.31	Somewhat limited Depth to saturated zone Too sandy	0.50 0.31	Somewhat limited Depth to saturated zone Droughty	0.78 0.02
Hamar-----	5	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.31	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.31	Very limited Depth to saturated zone Ponding Droughty	1.00 1.00 0.21
Ulen-----	5	Not limited		Not limited		Somewhat limited Depth to saturated zone	0.22

Table 17b.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>I15A:</b>							
Poppleton-----	3	Very limited Too sandy	1.00	Very limited Too sandy	1.00	Somewhat limited Droughty	0.09
Sandberg-----	3	Somewhat limited Too sandy	0.30	Somewhat limited Too sandy	0.30	Somewhat limited Droughty Gravel content	0.85 0.01
Foldahl-----	2	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy	0.31	Not limited	
Radium-----	2	Somewhat limited Too sandy	0.36	Somewhat limited Too sandy	0.36	Somewhat limited Droughty	0.76
<b>I16F:</b>							
Fluvaquents-----	55	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Ponding Flooding	1.00 1.00
		Ponding Flooding	1.00 0.60	Ponding Flooding	1.00 0.60	Depth to saturated zone	1.00
Hapludolls-----	25	Not limited		Not limited		Somewhat limited Slope	0.63
Hapludalfs-----	7	Very limited Slope	1.00	Somewhat limited Slope	0.44	Very limited Slope	1.00
Fairdale-----	5	Not limited		Not limited		Somewhat limited Flooding Slope	0.60 0.37
Water-----	5	Not rated		Not rated		Not rated	
Bowstring-----	2	Not rated		Not rated		Very limited Ponding Flooding Content of organic matter Depth to saturated zone	1.00 1.00 1.00 1.00
Rauville-----	1	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Ponding Flooding	1.00 1.00
		Ponding Flooding	1.00 0.60	Ponding Flooding	1.00 0.60	Depth to saturated zone	1.00
<b>I17A:</b>							
Foldahl-----	75	Not limited		Not limited		Not limited	
Kratka-----	10	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
Roliss-----	5	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00

Table 17b.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I17A:							
Flaming-----	4	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy	0.31	Somewhat limited Droughty	0.15
Grimstad-----	2	Somewhat limited Depth to saturated zone	0.50	Somewhat limited Depth to saturated zone	0.50	Somewhat limited Depth to saturated zone	0.78
Linveldt-----	2	Not limited		Not limited		Not limited	
Eckvoll-----	1	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy	0.31	Not limited	
Strathcona-----	1	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
I18A:							
Foldahl-----	75	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy	0.31	Not limited	
Kratka-----	10	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
Roliss-----	5	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
Flaming-----	4	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy	0.31	Somewhat limited Droughty	0.15
Grimstad-----	2	Somewhat limited Depth to saturated zone	0.50	Somewhat limited Depth to saturated zone	0.50	Somewhat limited Depth to saturated zone	0.78
Linveldt-----	2	Not limited		Not limited		Not limited	
Eckvoll-----	1	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy	0.31	Not limited	
Strathcona-----	1	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
I19A:							
Foxhome-----	65	Not limited		Not limited		Not limited	
Kittson-----	10	Not limited		Not limited		Not limited	
Strandquist-----	10	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00

Table 17b.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I19A:							
Foldahl-----	5	Not limited		Not limited		Not limited	
Grimstad-----	5	Somewhat limited Depth to saturated zone	0.50	Somewhat limited Depth to saturated zone	0.50	Somewhat limited Depth to saturated zone	0.78
Roliss-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Mavie-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding Droughty	1.00 1.00 0.01
I20A:							
Foxlake-----	75	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Clearwater-----	5	Very limited Depth to saturated zone Too clayey Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Too clayey Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Too clayey Ponding	1.00 1.00 1.00
Foxlake, very cobbly	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Augsburg-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Clearwater, depressional-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Espelie-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Hilaire-----	2	Not limited		Not limited		Somewhat limited Droughty	0.01
Reis-----	2	Very limited Depth to saturated zone Too clayey	1.00 1.00	Very limited Depth to saturated zone Too clayey	1.00 1.00	Very limited Depth to saturated zone Too clayey	1.00 1.00

Table 17b.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I20A: Wheatville-----	2	Somewhat limited Depth to saturated zone	0.78	Somewhat limited Depth to saturated zone	0.78	Somewhat limited Depth to saturated zone	0.90
I21A: Fram-----	85	Not limited		Not limited		Not limited	
Hedman-----	12	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Strathcona-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Foxhome-----	1	Not limited		Not limited		Not limited	
I22A: Glyndon-----	75	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Borup-----	10	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Augsburg-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Ulen-----	5	Not limited		Not limited		Somewhat limited Depth to saturated zone	0.22
Wheatville-----	3	Somewhat limited Depth to saturated zone	0.78	Somewhat limited Depth to saturated zone	0.78	Somewhat limited Depth to saturated zone	0.90
Flaming-----	2	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy	0.31	Somewhat limited Droughty	0.15
I23A: Glyndon-----	75	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Borup-----	10	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 17b.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>I23A:</b>							
Augsburg-----	5	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00
Ulen-----	5	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy	0.31	Somewhat limited Depth to saturated zone	0.22
Wheatville-----	3	Somewhat limited Depth to saturated zone	0.78	Somewhat limited Depth to saturated zone	0.78	Somewhat limited Depth to saturated zone	0.90
Flaming-----	2	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy	0.31	Somewhat limited Droughty	0.15
<b>I24A:</b>							
Grimstad-----	70	Somewhat limited Depth to saturated zone	0.50	Somewhat limited Depth to saturated zone	0.50	Somewhat limited Depth to saturated zone	0.78
Strathcona-----	12	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00
Foldahl-----	5	Not limited		Not limited		Not limited	
Hamerly-----	5	Somewhat limited Depth to saturated zone	0.78	Somewhat limited Depth to saturated zone	0.78	Somewhat limited Depth to saturated zone	0.90
Foxhome-----	2	Not limited		Not limited		Not limited	
Karlsruhe-----	2	Not limited		Not limited		Somewhat limited Depth to saturated zone	0.22
Mavie-----	2	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding Droughty	1.00  1.00 0.01
Ulen-----	2	Not limited		Not limited		Somewhat limited Depth to saturated zone	0.22
<b>I25A:</b>							
Hamar-----	75	Very limited Depth to saturated zone Ponding Too sandy	1.00  1.00 0.31	Very limited Depth to saturated zone Ponding Too sandy	1.00  1.00 0.31	Very limited Depth to saturated zone Ponding Droughty	1.00  1.00 0.21
Garborg-----	10	Somewhat limited Depth to saturated zone Too sandy	0.50  0.31	Somewhat limited Depth to saturated zone Too sandy	0.50  0.31	Somewhat limited Depth to saturated zone Droughty	0.78  0.02

Table 17b.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I25A:							
Rosewood-----	7	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Venlo-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Ponding Depth to saturated zone Droughty	1.00 1.00 0.01
Flaming-----	2	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy	0.31	Somewhat limited Droughty	0.15
Hangaard-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding Droughty	1.00 1.00 0.92
Kratka-----	1	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
I26A:							
Hamerly-----	75	Somewhat limited Depth to saturated zone	0.78	Somewhat limited Depth to saturated zone	0.78	Somewhat limited Depth to saturated zone	0.90
Vallers-----	12	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Foxhome-----	3	Not limited		Not limited		Not limited	
Grimstad-----	3	Somewhat limited Depth to saturated zone	0.50	Somewhat limited Depth to saturated zone	0.50	Somewhat limited Depth to saturated zone	0.78
Hamerly, very cobbly	3	Somewhat limited Depth to saturated zone	0.78	Somewhat limited Depth to saturated zone	0.78	Somewhat limited Depth to saturated zone	0.90
Strathcona-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Roliss, depressional	1	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00

Table 17b.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I27A: Hamre-----	80	Not rated		Not rated		Very limited Ponding Content of organic matter Depth to saturated zone	1.00 1.00 1.00
Northwood-----	5	Not rated		Not rated		Very limited Ponding Depth to saturated zone	1.00 1.00
Roliss-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Smiley-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Cathro-----	3	Not rated		Not rated		Very limited Ponding Content of organic matter Depth to saturated zone	1.00 1.00 1.00
Kratka-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
I28A: Hangaard-----	75	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding Droughty	1.00 1.00 0.92
Hamar-----	7	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.31	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.31	Very limited Depth to saturated zone Ponding Droughty	1.00 1.00 0.21
Syrene-----	7	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding Droughty	1.00 1.00 0.30
Karlsruhe-----	3	Not limited		Not limited		Somewhat limited Depth to saturated zone	0.22

Table 17b.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I28A:							
Rosewood-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Strandquist-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Deerwood-----	2	Not rated		Not rated		Very limited Ponding Depth to saturated zone	1.00 1.00
I29A:							
Hattie-----	75	Very limited Too clayey	1.00	Very limited Too clayey	1.00	Very limited Too clayey Depth to saturated zone	1.00 0.10
Clearwater-----	12	Very limited Depth to saturated zone Too clayey Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Too clayey Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Too clayey Ponding	1.00 1.00 1.00
Reis-----	6	Very limited Depth to saturated zone Too clayey	1.00 1.00	Very limited Depth to saturated zone Too clayey	1.00 1.00	Very limited Depth to saturated zone Too clayey	1.00 1.00
Hattie, very cobbly	5	Very limited Too clayey	1.00	Very limited Too clayey	1.00	Very limited Too clayey Depth to saturated zone	1.00 0.10
Hilaire-----	2	Not limited		Not limited		Not limited	
I29D:							
Hattie-----	85	Very limited Too clayey	1.00	Very limited Too clayey	1.00	Very limited Too clayey Slope Depth to saturated zone	1.00 0.63 0.10
Clearwater-----	6	Very limited Depth to saturated zone Too clayey Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Too clayey Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Too clayey Ponding	1.00 1.00 1.00
Hattie, level-----	5	Very limited Too clayey	1.00	Very limited Too clayey	1.00	Very limited Too clayey Depth to saturated zone	1.00 0.10

Table 17b.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I29D: Boyerlake-----	4	Very limited Too clayey	1.00	Very limited Too clayey	1.00	Very limited Too clayey Depth to saturated zone	1.00 0.10
I30A: Hedman-----	85	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Fram-----	5	Not limited		Not limited		Not limited	
Strathcona-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Haug-----	3	Not rated		Not rated		Very limited Ponding Depth to saturated zone	1.00 1.00
Strandquist-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
I31A: Hedman-----	50	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Fram-----	40	Not limited		Not limited		Not limited	
Strathcona-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Haug-----	3	Not rated		Not rated		Very limited Ponding Depth to saturated zone	1.00 1.00
Strandquist-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
I32A: Hilaire-----	75	Not limited		Not limited		Not limited	
Espelie-----	12	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 17b.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I32A:							
Huot-----	5	Not limited		Not limited		Not limited	
Flaming-----	2	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy	0.31	Somewhat limited Droughty	0.15
Foxlake-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Wheatville-----	2	Somewhat limited Depth to saturated zone	0.78	Somewhat limited Depth to saturated zone	0.78	Somewhat limited Depth to saturated zone	0.90
Thiefriver-----	1	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Wyandotte-----	1	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
I33A:							
Hilaire-----	75	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy	0.31	Not limited	
Espelie-----	12	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Huot-----	5	Not limited		Not limited		Not limited	
Flaming-----	2	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy	0.31	Somewhat limited Droughty	0.15
Foxlake-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Wheatville-----	2	Somewhat limited Depth to saturated zone	0.78	Somewhat limited Depth to saturated zone	0.78	Somewhat limited Depth to saturated zone	0.90
Thiefriver-----	1	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Wyandotte-----	1	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 17b.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I34A:							
Huot-----	75	Not limited		Not limited		Not limited	
Thiefriver-----	12	Very limited		Very limited		Very limited	
		Depth to	1.00	Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone		saturated zone	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
Hilaire-----	5	Not limited		Not limited		Not limited	
Flaming-----	3	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.31	Too sandy	0.31	Droughty	0.15
Foxlake-----	3	Very limited		Very limited		Very limited	
		Depth to	1.00	Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone		saturated zone	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
Ulen-----	2	Not limited		Not limited		Somewhat limited	
						Depth to	0.22
						saturated zone	
I35A:							
Karlsruhe-----	70	Not limited		Not limited		Somewhat limited	
						Depth to	0.22
						saturated zone	
Syrene-----	10	Very limited		Very limited		Very limited	
		Depth to	1.00	Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone		saturated zone	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
						Droughty	0.30
Ulen-----	10	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.31	Too sandy	0.31	Depth to	0.22
						saturated zone	
Radium-----	5	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.36	Too sandy	0.36	Droughty	0.76
Rosewood-----	3	Very limited		Very limited		Very limited	
		Depth to	1.00	Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone		saturated zone	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
Sandberg-----	2	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.30	Too sandy	0.30	Droughty	0.85
						Gravel content	0.01
I36A:							
Kittson-----	70	Not limited		Not limited		Not limited	
Roliss-----	12	Very limited		Very limited		Very limited	
		Depth to	1.00	Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone		saturated zone	
		Ponding	1.00	Ponding	1.00	Ponding	1.00

Table 17b.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I36A:							
Hamerly-----	5	Somewhat limited Depth to saturated zone	0.78	Somewhat limited Depth to saturated zone	0.78	Somewhat limited Depth to saturated zone	0.90
Kratka-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Grimstad-----	3	Somewhat limited Depth to saturated zone	0.50	Somewhat limited Depth to saturated zone	0.50	Somewhat limited Depth to saturated zone	0.78
Strandquist-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Foxhome-----	2	Not limited		Not limited		Not limited	
I37A:							
Kratka, depressional	45	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Strathcona, depressional-----	45	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Northwood-----	5	Not rated		Not rated		Very limited Ponding Depth to saturated zone	1.00 1.00
Kratka-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Strathcona-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Roliss-----	1	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
I38A:							
Kratka-----	70	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 17b.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I38A:							
Smiley-----	7	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Foldahl-----	5	Not limited		Not limited		Not limited	
Kratka, very cobbly	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Strathcona-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Kratka, depressional	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Strandquist-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Linveltdt-----	2	Not limited		Not limited		Not limited	
I39A:							
Linveltdt-----	65	Not limited		Not limited		Not limited	
Kratka-----	14	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Reiner-----	10	Not limited		Not limited		Not limited	
Smiley-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Eckvoll-----	3	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy	0.31	Not limited	
Foldahl-----	2	Not limited		Not limited		Not limited	
Pelan-----	1	Not limited		Not limited		Not limited	
I40B:							
Maddock-----	85	Somewhat limited Too sandy	0.96	Somewhat limited Too sandy	0.96	Somewhat limited Droughty	0.27
Flaming-----	5	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy	0.31	Somewhat limited Droughty	0.15

Table 17b.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I40B: Sandberg-----	5	Somewhat limited Too sandy	0.30	Somewhat limited Too sandy	0.30	Somewhat limited Droughty Gravel content	0.85 0.01
Halverson-----	3	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy	0.31	Not limited	
Hamar-----	2	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.31	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.31	Very limited Depth to saturated zone Ponding Droughty	1.00 1.00 1.00 0.21
I40F: Maddock-----	90	Somewhat limited Slope Too sandy	0.68 0.31	Somewhat limited Too sandy	0.31	Very limited Slope Droughty	1.00 0.27
Flaming-----	5	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy	0.31	Somewhat limited Droughty	0.15
Sandberg-----	5	Somewhat limited Too sandy	0.30	Somewhat limited Too sandy	0.30	Somewhat limited Droughty Gravel content	0.85 0.01
I41A: Markey-----	80	Not rated		Not rated		Very limited Ponding Content of organic matter Depth to saturated zone	1.00 1.00 1.00
Deerwood-----	12	Not rated		Not rated		Very limited Ponding Depth to saturated zone	1.00 1.00
Berner-----	2	Not rated		Not rated		Very limited Ponding Content of organic matter Depth to saturated zone	1.00 1.00 1.00
Hamar-----	2	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.31	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.31	Very limited Depth to saturated zone Ponding Droughty	1.00 1.00 1.00 0.21
Seelyeville-----	2	Not rated		Not rated		Very limited Ponding Depth to saturated zone	1.00 1.00

Table 17b.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I41A: Syrene-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding Droughty	1.00 1.00 0.30
I42A: Markey, ponded-----	85	Not rated		Not rated		Very limited Ponding Content of organic matter Depth to saturated zone	1.00 1.00 1.00
Markey-----	5	Not rated		Not rated		Very limited Ponding Content of organic matter Depth to saturated zone	1.00 1.00 1.00
Deerwood-----	4	Not rated		Not rated		Very limited Ponding Depth to saturated zone	1.00 1.00
Seelyeville, ponded	4	Not rated		Not rated		Very limited Ponding Depth to saturated zone	1.00 1.00
Hamar-----	1	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.31	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.31	Very limited Depth to saturated zone Ponding Droughty	1.00 1.00 0.21
Hangaard-----	1	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding Droughty	1.00 1.00 0.92
I43A: Mavie-----	70	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding Droughty	1.00 1.00 0.01
Vallers-----	10	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 17b.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I43A:							
Strandquist-----	7	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Strathcona-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Strathcona, depressional-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Foxhome-----	2	Not limited		Not limited		Not limited	
Karlsruhe-----	2	Not limited		Not limited		Somewhat limited Depth to saturated zone	0.22
Grimstad-----	1	Somewhat limited Depth to saturated zone	0.50	Somewhat limited Depth to saturated zone	0.50	Somewhat limited Depth to saturated zone	0.78
I44A:							
Newfolden-----	75	Not limited		Not limited		Not limited	
Smiley-----	12	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Boash-----	8	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Linveldt-----	4	Not limited		Not limited		Not limited	
Hapludolls-----	1	Not limited		Not limited		Somewhat limited Slope	0.63
I45A:							
Northwood-----	75	Not rated		Not rated		Very limited Ponding Depth to saturated zone	1.00 1.00
Hamre-----	10	Not rated		Not rated		Very limited Ponding Content of organic matter Depth to saturated zone	1.00 1.00 1.00

Table 17b.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I45A:							
Berner-----	5	Not rated		Not rated		Very limited Ponding Content of organic matter Depth to saturated zone	1.00 1.00 1.00
Kratka-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00 1.00
Strandquist-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Roliss-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
I46A:							
Pits-----	85	Not rated		Not rated		Not rated	
Udipsamments-----	10	Very limited Too sandy Slope	1.00 1.00	Very limited Too sandy Slope	1.00 0.01	Very limited Slope Droughty Too sandy	1.00 0.57 0.50
Radium-----	2	Somewhat limited Too sandy	0.36	Somewhat limited Too sandy	0.36	Somewhat limited Droughty	0.76
Maddock-----	1	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy	0.31	Somewhat limited Droughty	0.27
Marquette-----	1	Somewhat limited Too sandy	0.36	Somewhat limited Too sandy	0.36	Somewhat limited Droughty	0.85
Sandberg-----	1	Somewhat limited Too sandy	0.30	Somewhat limited Too sandy	0.30	Somewhat limited Droughty Gravel content	0.85 0.01
I47A:							
Poppleton-----	75	Very limited Too sandy	1.00	Very limited Too sandy	1.00	Somewhat limited Droughty	0.09
Flaming-----	12	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy	0.31	Somewhat limited Droughty	0.15
Garborg-----	5	Somewhat limited Depth to saturated zone Too sandy	0.50 0.31	Somewhat limited Depth to saturated zone Too sandy	0.50 0.31	Somewhat limited Depth to saturated zone Droughty	0.78 0.02

Table 17b.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>I47A:</b>							
Hamar-----	3	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.31	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.31	Very limited Depth to saturated zone Ponding Droughty	1.00 1.00 0.21
Radium-----	2	Somewhat limited Too sandy	0.36	Somewhat limited Too sandy	0.36	Somewhat limited Droughty	0.76
Ulen-----	2	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy	0.31	Somewhat limited Depth to saturated zone	0.22
Maddock-----	1	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy	0.31	Somewhat limited Droughty	0.27
<b>I48A:</b>							
Radium-----	75	Somewhat limited Too sandy	0.36	Somewhat limited Too sandy	0.36	Somewhat limited Droughty	0.76
Sandberg-----	7	Somewhat limited Too sandy	0.30	Somewhat limited Too sandy	0.30	Somewhat limited Droughty Gravel content	0.85 0.01
Oylen-----	5	Not limited		Not limited		Somewhat limited Droughty	0.01
Flaming-----	4	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy	0.31	Somewhat limited Droughty	0.15
Garborg-----	3	Somewhat limited Depth to saturated zone Too sandy	0.50 0.31	Somewhat limited Depth to saturated zone Too sandy	0.50 0.31	Somewhat limited Depth to saturated zone Droughty	0.78 0.02
Hangaard-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding Droughty	1.00 1.00 0.92
Hamar-----	2	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.31	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.31	Very limited Depth to saturated zone Ponding Droughty	1.00 1.00 0.21
Poppleton-----	1	Very limited Too sandy	1.00	Very limited Too sandy	1.00	Somewhat limited Droughty	0.09
<b>I49A:</b>							
Rauville-----	80	Very limited Depth to saturated zone Ponding Flooding	1.00 1.00 0.60	Very limited Depth to saturated zone Ponding Flooding	1.00 1.00 0.60	Very limited Ponding Flooding Depth to saturated zone	1.00 1.00 1.00

Table 17b.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I49A:							
Fluvaquents-----	12	Very limited Depth to saturated zone Ponding Flooding	1.00  1.00 0.60	Very limited Depth to saturated zone Ponding Flooding	1.00  1.00 0.60	Very limited Ponding Flooding Depth to saturated zone	1.00 1.00 1.00
Water-----	5	Not rated		Not rated		Not rated	
Lamoure-----	3	Very limited Depth to saturated zone Ponding Flooding	1.00  1.00 0.40	Very limited Depth to saturated zone Ponding Flooding	1.00  1.00 0.40	Very limited Flooding Depth to saturated zone Ponding	1.00 1.00 1.00
I50A:							
Reiner-----	70	Not limited		Not limited		Not limited	
Smiley-----	12	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Reiner, very cobbly	7	Not limited		Not limited		Not limited	
Linveltd-----	5	Not limited		Not limited		Not limited	
Eckvoll-----	3	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy	0.31	Not limited	
Kratka-----	3	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
I51A:							
Reiner-----	65	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy	0.31	Not limited	
Smiley-----	9	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Reiner fine sandy loam-----	8	Not limited		Not limited		Not limited	
Linveltd-----	7	Not limited		Not limited		Not limited	
Kratka-----	5	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Eckvoll-----	3	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy	0.31	Not limited	
Reiner, very cobbly	3	Not limited		Not limited		Not limited	

Table 17b.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I52A:							
Reis-----	55	Very limited Depth to saturated zone Too clayey	1.00 1.00	Very limited Depth to saturated zone Too clayey	1.00 1.00	Very limited Depth to saturated zone Too clayey	1.00 1.00
Clearwater-----	30	Very limited Depth to saturated zone Too clayey Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Too clayey Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Too clayey Ponding	1.00 1.00 1.00
Clearwater, very cobble-----	5	Very limited Depth to saturated zone Too clayey Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Too clayey Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Too clayey Ponding	1.00 1.00 1.00
Clearwater, depressional-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Espelie-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Hattie-----	3	Very limited Too clayey	1.00	Very limited Too clayey	1.00	Very limited Too clayey Depth to saturated zone	1.00 0.10
Wyandotte-----	1	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
I53A:							
Roliss-----	75	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Kratka-----	8	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Roliss, very cobble	7	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 17b.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I53A: Kittson-----	5	Not limited		Not limited		Not limited	
Roliss, depressional	3	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Ponding Depth to saturated zone	1.00  1.00
Smiley-----	2	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00
I54A: Roliss, depressional	80	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Ponding Depth to saturated zone	1.00  1.00
Roliss-----	12	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00
Hamre-----	5	Not rated		Not rated		Very limited Ponding Content of organic matter Depth to saturated zone	1.00  1.00  1.00
Kratka-----	3	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00
I55A: Rosewood-----	75	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00
Ulen-----	10	Not limited		Not limited		Somewhat limited Depth to saturated zone	0.22
Hamar-----	6	Very limited Depth to saturated zone Ponding Too sandy	1.00  1.00 0.31	Very limited Depth to saturated zone Ponding Too sandy	1.00  1.00 0.31	Very limited Depth to saturated zone Ponding Droughty	1.00  1.00 0.21
Rosewood, depressional-----	3	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Ponding Depth to saturated zone	1.00  1.00

Table 17b.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I55A:							
Syrene-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding Droughty	1.00 1.00 0.30
Karlsruhe-----	1	Not limited		Not limited		Somewhat limited Depth to saturated zone	0.22
Strathcona-----	1	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Thiefriver-----	1	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
I56A:							
Rosewood-----	50	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Venlo-----	40	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Ponding Depth to saturated zone Droughty	1.00 1.00 0.01
Deerwood-----	3	Not rated		Not rated		Very limited Ponding Depth to saturated zone	1.00 1.00
Syrene-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding Droughty	1.00 1.00 0.30
Ulen-----	2	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy	0.31	Somewhat limited Depth to saturated zone	0.22
Strathcona-----	1	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Thiefriver-----	1	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 17b.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>I57B:</b>							
Sandberg-----	50	Somewhat limited Too sandy	0.30	Somewhat limited Too sandy	0.30	Somewhat limited Droughty Gravel content	0.85 0.01
Radium-----	25	Somewhat limited Too sandy	0.36	Somewhat limited Too sandy	0.36	Somewhat limited Droughty	0.76
Sioux-----	8	Not limited		Not limited		Somewhat limited Droughty	0.80
Oylen-----	7	Not limited		Not limited		Somewhat limited Droughty	0.01
Flaming-----	5	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy	0.31	Somewhat limited Droughty	0.15
Garborg-----	5	Somewhat limited Depth to saturated zone	0.50	Somewhat limited Depth to saturated zone	0.50	Somewhat limited Depth to saturated zone	0.78
		Too sandy	0.31	Too sandy	0.31	Droughty	0.02
<b>I58A:</b>							
Seelyeville-----	90	Not rated		Not rated		Very limited Ponding Depth to saturated zone	1.00 1.00
Cathro-----	3	Not rated		Not rated		Very limited Ponding	1.00
						Content of organic matter	1.00
						Depth to saturated zone	1.00
Dora-----	3	Not rated		Not rated		Very limited Ponding	1.00
						Content of organic matter	1.00
						Depth to saturated zone	1.00
Markey-----	3	Not rated		Not rated		Very limited Ponding	1.00
						Content of organic matter	1.00
						Depth to saturated zone	1.00
Bernier-----	1	Not rated		Not rated		Very limited Ponding	1.00
						Content of organic matter	1.00
						Depth to saturated zone	1.00

Table 17b.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I59A:							
Smiley-----	65	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Smiley, very cobbly	10	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Kratka-----	9	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Roliss-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Reiner-----	4	Not limited		Not limited		Not limited	
Linveltd-----	3	Not limited		Not limited		Not limited	
Smiley, depressional	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Strandquist-----	1	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
I60A:							
Smiley, depressional	80	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Smiley-----	10	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Hamre-----	5	Not rated		Not rated		Very limited Ponding Content of organic matter Depth to saturated zone	1.00 1.00 1.00
Kratka-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 17b.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>I61A:</b>							
Strandquist-----	70	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Mavie-----	8	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding Droughty	1.00 1.00 0.01
Roliss-----	7	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Kratka-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Foxhome-----	4	Not limited		Not limited		Not limited	
Hangaard-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding Droughty	1.00 1.00 0.92
Northwood-----	3	Not rated		Not rated		Very limited Ponding Depth to saturated zone	1.00 1.00
<b>I62A:</b>							
Syrene-----	70	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding Droughty	1.00 1.00 0.30
Rosewood-----	11	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Hangaard-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding Droughty	1.00 1.00 0.92
Karlsruhe-----	4	Not limited		Not limited		Somewhat limited Depth to saturated zone	0.22

Table 17b.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I62A:							
Deerwood-----	3	Not rated		Not rated		Very limited Ponding Depth to saturated zone	1.00 1.00
Hamar-----	3	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.31	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.31	Very limited Depth to saturated zone Ponding Droughty	1.00 1.00 0.21
Strandquist-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Radium-----	1	Somewhat limited Too sandy	0.36	Somewhat limited Too sandy	0.36	Somewhat limited Droughty	0.76
Wyandotte-----	1	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
I63A:							
Thiefriver-----	70	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Espelie-----	10	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Foxlake-----	7	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Huot-----	5	Not limited		Not limited		Not limited	
Clearwater, depressional-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Rosewood-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Ulen-----	1	Not limited		Not limited		Somewhat limited Depth to saturated zone	0.22

Table 17b.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I63A: Wyandotte-----	1	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00
I64A: Ulen-----	70	Not limited		Not limited		Somewhat limited Depth to saturated zone	0.22
Rosewood-----	10	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00
Flaming-----	8	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy	0.31	Somewhat limited Droughty	0.15
Karlsruhe-----	5	Not limited		Not limited		Somewhat limited Depth to saturated zone	0.22
Radium-----	3	Somewhat limited Too sandy	0.36	Somewhat limited Too sandy	0.36	Somewhat limited Droughty	0.76
Strathcona-----	2	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00
Thiefriever-----	2	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00
I65A: Ulen-----	70	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy	0.31	Somewhat limited Depth to saturated zone	0.22
Rosewood-----	10	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00
Flaming-----	6	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy	0.31	Somewhat limited Droughty	0.15
Poppleton-----	4	Very limited Too sandy	1.00	Very limited Too sandy	1.00	Somewhat limited Droughty	0.09
Karlsruhe-----	3	Not limited		Not limited		Somewhat limited Depth to saturated zone	0.22
Radium-----	3	Somewhat limited Too sandy	0.36	Somewhat limited Too sandy	0.36	Somewhat limited Droughty	0.76

Table 17b.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I65A: Strathcona-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Thiefriver-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
I66A: Vallars-----	75	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Vallars, very cobbly	7	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Hamerly-----	6	Somewhat limited Depth to saturated zone	0.78	Somewhat limited Depth to saturated zone	0.78	Somewhat limited Depth to saturated zone	0.90
Grimstad-----	3	Somewhat limited Depth to saturated zone	0.50	Somewhat limited Depth to saturated zone	0.50	Somewhat limited Depth to saturated zone	0.78
Mavie-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding Droughty	1.00 1.00 0.01
Roliss, depressional	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Strathcona-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
I67A: Wheatville-----	70	Somewhat limited Depth to saturated zone	0.78	Somewhat limited Depth to saturated zone	0.78	Somewhat limited Depth to saturated zone	0.90
Augsburg-----	13	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Glyndon-----	8	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00

Table 17b.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>I67A:</b>							
Foxlake-----	5	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00
Hilaire-----	2	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy	0.31	Not limited	
Ulen-----	2	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy	0.31	Somewhat limited Depth to saturated zone	0.22
<b>I68A:</b>							
Wheatville-----	70	Somewhat limited Depth to saturated zone	0.78	Somewhat limited Depth to saturated zone	0.78	Somewhat limited Depth to saturated zone	0.90
Augsburg-----	13	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00
Glyndon-----	8	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Foxlake-----	5	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00
Hilaire-----	2	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy	0.31	Not limited	
Ulen-----	2	Somewhat limited Too sandy	0.31	Somewhat limited Too sandy	0.31	Somewhat limited Depth to saturated zone	0.22
<b>I69A:</b>							
Wyandotte-----	65	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00
Foxlake-----	10	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00
Espelie-----	8	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00

Table 17b.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I69A: Clearwater, depressional-----	5	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Ponding Depth to saturated zone	1.00  1.00
Thiefriver-----	5	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00
Karlsruhe-----	4	Not limited		Not limited		Somewhat limited Depth to saturated zone	0.22
Syrene-----	3	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding Droughty	1.00  1.00 0.30
I70A: Strathcona-----	70	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00
Kratka-----	10	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00
Roliss-----	6	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00
Grimstad-----	5	Somewhat limited Depth to saturated zone	0.50	Somewhat limited Depth to saturated zone	0.50	Somewhat limited Depth to saturated zone	0.78
Mavie-----	3	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding Droughty	1.00  1.00 0.01
Rosewood-----	3	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00
Strathcona, depressional-----	3	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Depth to saturated zone Ponding	1.00  1.00	Very limited Ponding Depth to saturated zone	1.00  1.00

Table 17b.--Recreation--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
M-W: Miscellaneous water	100	Not rated		Not rated		Not rated	
W: Water-----	100	Not rated		Not rated		Not rated	

Table 18.--Wildlife Habitat

(See text for definitions of terms used in this table. Absence of an entry indicates that no rating is applicable)

Map symbol and soil name	Pct. of map unit	Potential for habitat elements								Potential as habitat for--			
		Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hard- wood trees	Conif- erous plants	Shrubs	Wetland plants	Shallow water areas	Open- land wild- life	Wood- land wild- life	Wetland wild- life	
<b>B109A:</b>													
Bowstring-----	45	Very poor	Poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
Fluvaquents-----	40	Very poor	Poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Very poor	Poor	Good
Hapludalfs-----	5	Poor	Good	Good	Good	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
Seelyeville-----	5	Very poor	Fair	Poor	Poor	Poor	Poor	Poor	Good	Good	Good	Poor	Good
Water-----	5	---	---	---	---	---	---	---	---	---	---	---	---
<b>B200A:</b>													
Garnes-----	70	Good	Good	Good	Good	Fair	Good	Good	Poor	Poor	Good	Good	Poor
Chilgren-----	13	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Fair	Fair	Good	Fair
Eckvoll-----	5	Fair	Fair	Good	Good	Good	Fair	Fair	Poor	Poor	Fair	Good	Poor
Garnes, very stony-----	5	Good	Good	Good	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor
Grygla-----	4	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair
Pelan-----	3	Poor	Fair	Fair	Fair	Fair	Fair	Fair	Poor	Poor	Fair	Fair	Poor
<b>B201A:</b>													
Chilgren-----	75	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Fair	Fair	Good	Fair
Garnes-----	9	Good	Good	Good	Good	Fair	Good	Good	Poor	Poor	Good	Good	Poor
Grygla-----	5	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair
Grygla, depressional----	5	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
Hamre-----	5	Poor	Fair	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
Pelan-----	1	Poor	Fair	Fair	Fair	Fair	Fair	Fair	Poor	Poor	Fair	Fair	Poor

Table 18.--Wildlife Habitat--Continued

Map symbol and soil name	Pct. of map unit	Potential for habitat elements								Potential as habitat for--			
		Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hard- wood trees	Conif- erous plants	Shrubs	Wetland plants	Shallow water areas	Open- land wild- life	Wood- land wild- life	Wetland wild- life	
<b>B202A:</b>													
Cathro-----	80	Poor	Fair	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
Hamre-----	8	Poor	Fair	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
Chilgren-----	3	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Fair	Fair	Good	Fair
Northwood-----	3	Very poor	Very poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Very poor	Poor	Good
Berner-----	2	Very poor	Poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
Grygla-----	2	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair
Seelyeville-----	2	Very poor	Fair	Poor	Poor	Poor	Poor	Poor	Good	Good	Good	Poor	Good
<b>B203A:</b>													
Northwood-----	75	Very poor	Very poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Very poor	Poor	Good
Hamre-----	10	Poor	Fair	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
Grygla-----	7	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair
Berner-----	5	Very poor	Poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
Chilgren-----	3	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Fair	Fair	Good	Fair
<b>B204A:</b>													
Roliss-----	75	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Fair	Good	Fair	Fair
Grygla-----	8	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair
Chilgren-----	5	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Fair	Fair	Good	Fair
Garnes-----	5	Good	Good	Good	Good	Fair	Good	Good	Poor	Poor	Good	Good	Poor
Roliss, depressiona-----	5	Poor	Poor	Fair	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
Hamre-----	2	Poor	Fair	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good

Table 18.--Wildlife Habitat--Continued

Map symbol and soil name	Pct. of map unit	Potential for habitat elements								Potential as habitat for--			
		Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hard- wood trees	Conif- erous plants	Shrubs	Wetland plants	Shallow water areas	Open- land wild- life	Wood- land wild- life	Wetland wild- life	
<b>E205A:</b>													
Berner-----	80	Very poor	Poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
Northwood-----	7	Very poor	Very poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Very poor	Poor	Good
Grygla-----	5	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair
Cathro-----	3	Poor	Fair	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
Hamre-----	3	Poor	Fair	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
Seelyeville-----	2	Very poor	Fair	Poor	Poor	Poor	Poor	Poor	Good	Good	Good	Poor	Good
<b>E206A:</b>													
Hamre-----	80	Poor	Fair	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
Chilgren-----	8	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Fair	Fair	Good	Fair
Northwood-----	5	Very poor	Very poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Very poor	Poor	Good
Cathro-----	3	Poor	Fair	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
Grygla-----	2	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair
Roliss-----	2	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Fair	Good	Fair	Fair
<b>I1A:</b>													
Augsburg-----	75	Fair	Good	Fair	Fair	Poor	Fair	Fair	Fair	Fair	Good	Fair	Fair
Borup-----	10	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
Foxlake-----	5	Fair	Fair	Fair	Fair	Fair	Poor	Poor	Poor	Good	Good	Fair	Fair
Augsburg, depressiona--	3	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
Wheatville-----	3	Good	Good	Good	Fair	Poor	Fair	Fair	Poor	Poor	Good	Fair	Poor
Glyndon-----	2	Good	Good	Good	Fair	Fair	Fair	Fair	Poor	Poor	Good	Fair	Poor

Table 18.--Wildlife Habitat--Continued

Map symbol and soil name	Pct. of map unit	Potential for habitat elements								Potential as habitat for--			
		Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hard- wood trees	Conif- erous plants	Shrubs	Wetland plants	Shallow water areas	Open- land wild- life	Wood- land wild- life	Wetland wild- life	
<b>I1A:</b>													
Espelie-----	1	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
Hattie-----	1	Fair	Good	Fair	Fair	Good	Fair	Fair	Very poor	Very poor	Fair	Good	Very poor
<b>I2A:</b>													
Augsburg-----	75	Fair	Good	Fair	Fair	Poor	Fair	Fair	Fair	Fair	Good	Fair	Fair
Borup-----	10	Fair	Fair	Fair	Fair	Poor	Fair	Fair	Good	Good	Fair	Fair	Good
Foxlake-----	5	Fair	Fair	Fair	Fair	Fair	Poor	Poor	Poor	Good	Good	Fair	Fair
Augsburg, depressiona--	3	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
Wheatville-----	3	Good	Good	Good	Fair	Poor	Fair	Fair	Poor	Poor	Good	Fair	Poor
Glyndon-----	2	Good	Good	Good	Fair	Fair	Fair	Fair	Poor	Poor	Good	Fair	Poor
Espelie-----	1	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
Hattie-----	1	Fair	Good	Fair	Fair	Good	Fair	Fair	Very poor	Very poor	Fair	Good	Very poor
<b>I3A:</b>													
Berner-----	80	Very poor	Poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
Northwood-----	7	Very poor	Very poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Very poor	Poor	Good
Kratka-----	5	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair
Hamre-----	3	Poor	Fair	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
Strathcona-----	3	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
Seelyeville-----	2	Very poor	Fair	Poor	Poor	Poor	Poor	Poor	Good	Good	Good	Poor	Good
<b>I4A:</b>													
Berner-----	30	Very poor	Very poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good

Table 18.--Wildlife Habitat--Continued

Map symbol and soil name	Pct. of map unit	Potential for habitat elements								Potential as habitat for--			
		Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hard- wood trees	Conif- erous plants	Shrubs	Wetland plants	Shallow water areas	Open- land wild- life	Wood- land wild- life	Wetland wild- life	
I4A:													
Rosewood, depressional--	30	Very poor	Very poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
Strathcona, depressional	30	Very poor	Very poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
Rosewood-----	4	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
Deerwood-----	2	Very poor	Very poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Very poor	Poor	Good
Mavie-----	2	Fair	Fair	Fair	Fair	Poor	Fair	Fair	Good	Good	Fair	Fair	Good
Strathcona-----	2	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
I5A:													
Borup-----	75	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
Glyndon-----	9	Good	Good	Good	Fair	Fair	Fair	Fair	Poor	Poor	Good	Fair	Poor
Rosewood-----	8	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
Augsburg-----	5	Fair	Good	Fair	Fair	Poor	Fair	Fair	Fair	Fair	Good	Fair	Fair
Augsburg, depressional--	3	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
I6A:													
Borup-----	75	Fair	Fair	Fair	Fair	Poor	Fair	Fair	Good	Good	Fair	Fair	Good
Glyndon-----	9	Good	Good	Good	Fair	Fair	Fair	Fair	Poor	Poor	Good	Fair	Poor
Rosewood-----	8	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
Augsburg-----	5	Fair	Good	Fair	Fair	Poor	Fair	Fair	Fair	Fair	Good	Fair	Fair
Augsburg, depressional--	3	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
I7A:													
Bowstring-----	45	Very poor	Poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
Fluvaquents-----	45	Very poor	Poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Very poor	Poor	Good

Table 18.--Wildlife Habitat--Continued

Map symbol and soil name	Pct. of map unit	Potential for habitat elements								Potential as habitat for--			
		Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hard- wood trees	Conif- erous plants	Shrubs	Wetland plants	Shallow water areas	Open- land wild- life	Wood- land wild- life	Wetland wild- life	
I7A:													
Hapludolls-----	5	Good	Good	Good	Good	Good	Fair	Poor	Very poor	Good	Good	Very poor	
Water-----	5	---	---	---	---	---	---	---	---	---	---	---	
I8A:													
Cathro-----	80	Poor	Fair	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good	
Hamre-----	8	Poor	Fair	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good	
Northwood-----	3	Very poor	Very poor	Poor	Poor	Poor	Poor	Good	Good	Very poor	Poor	Good	
Roliss-----	3	Fair	Good	Fair	Fair	Fair	Fair	Good	Fair	Good	Fair	Fair	
Berner-----	2	Very poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good	
Kratka-----	2	Fair	Good	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair	
Seelyeville-----	2	Very poor	Fair	Poor	Poor	Poor	Poor	Good	Good	Good	Poor	Good	
I9A:													
Clearwater-----	80	Poor	Poor	Fair	Fair	Fair	Poor	Good	Good	Good	Fair	Good	
Clearwater, very cobbly	5	Poor	Poor	Fair	Fair	Fair	Poor	Good	Good	Good	Fair	Good	
Reis-----	5	Fair	Fair	Fair	Poor	Fair	Fair	Good	Good	Fair	Poor	Good	
Clearwater, depressional	3	Poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good	
Espelie-----	3	Fair	Good	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good	
Foxlake-----	2	Fair	Fair	Fair	Fair	Fair	Poor	Poor	Good	Good	Fair	Fair	
Hattie-----	1	Fair	Good	Fair	Fair	Good	Fair	Very poor	Very poor	Fair	Good	Very poor	
Huot-----	1	Good	Good	Fair	Fair	Fair	Fair	Poor	Poor	Good	Fair	Fair	
I10A:													
Clearwater, depressional	85	Poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good	

Table 18.--Wildlife Habitat--Continued

Map symbol and soil name	Pct. of map unit	Potential for habitat elements								Potential as habitat for--		
		Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hard- wood trees	Conif- erous plants	Shrubs	Wetland plants	Shallow water areas	Open- land wild- life	Wood- land wild- life	Wetland wild- life
I10A:												
Clearwater-----	9	Poor	Poor	Fair	Fair	Fair	Poor	Good	Good	Good	Fair	Good
Augsburg, depressional--	3	Poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
Reis-----	2	Fair	Fair	Fair	Poor	Fair	Fair	Good	Good	Fair	Poor	Good
Espelie-----	1	Fair	Good	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
I11A:												
Deerwood-----	85	Very poor	Very poor	Poor	Poor	Poor	Poor	Good	Good	Very poor	Poor	Good
Rosewood-----	6	Fair	Fair	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
Markey-----	3	Very poor	Very poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
Strathcona-----	2	Fair	Good	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
Syrene-----	2	Fair	Fair	Fair	Fair	Poor	Fair	Good	Good	Fair	Fair	Good
Venlo-----	2	Very poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
I12A:												
Eckvoll-----	70	Fair	Fair	Good	Good	Good	Fair	Poor	Poor	Fair	Good	Poor
Kratka-----	8	Fair	Good	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair
Smiley-----	7	Fair	Good	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair
Linveltdt-----	5	Fair	Fair	Fair	Fair	Fair	Fair	Poor	Poor	Fair	Fair	Poor
Reiner-----	5	Good	Good	Good	Good	Good	Good	Poor	Poor	Fair	Fair	Poor
Foldahl-----	2	Fair	Good	Good	Good	Fair	Fair	Poor	Poor	Good	Fair	Poor
Pelan-----	2	Poor	Fair	Fair	Fair	Fair	Fair	Poor	Poor	Fair	Fair	Poor
Poppleton-----	1	Poor	Fair	Fair	Fair	Fair	Fair	Poor	Poor	Fair	Fair	Poor
I13A:												
Espelie-----	75	Fair	Good	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good

Table 18.--Wildlife Habitat--Continued

Map symbol and soil name	Pct. of map unit	Potential for habitat elements								Potential as habitat for--		
		Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hard- wood trees	Conif- erous plants	Shrubs	Wetland plants	Shallow water areas	Open- land wild- life	Wood- land wild- life	Wetland wild- life
I13A:												
Foxlake-----	8	Fair	Fair	Fair	Fair	Fair	Poor	Poor	Good	Good	Fair	Fair
Hilaire-----	7	Fair	Good	Good	Fair	Fair	Fair	Poor	Poor	Good	Fair	Poor
Clearwater, depressional	5	Poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
Thiefriver-----	5	Fair	Good	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
I14B:												
Fairdale-----	85	Good	Good	Good	Good	Good	Fair	Poor	Very poor	Good	Good	Very poor
Fluvaquents-----	6	Very poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Very poor	Poor	Good
Hapludolls-----	5	Good	Good	Good	Good	Good	Fair	Poor	Very poor	Good	Good	Very poor
Hapludalfs-----	2	Poor	Good	Good	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
Zell-----	2	Very poor	Fair	Fair	Poor	Very poor	Fair	Very poor	Very poor	Very poor	Very poor	Very poor
I14D:												
Fairdale-----	85	Fair	Good	Good	Good	Good	Fair	Very poor	Very poor	Good	Good	Very poor
Fluvaquents-----	6	Very poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Very poor	Poor	Good
Hapludolls-----	4	Good	Good	Good	Good	Good	Fair	Poor	Very poor	Good	Good	Very poor
Zell-----	3	Very poor	Fair	Fair	Poor	Very poor	Fair	Very poor	Very poor	Very poor	Very poor	Very poor
Hapludalfs-----	2	Poor	Good	Good	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
I15A:												
Flaming-----	70	Fair	Fair	Good	Fair	Fair	Fair	Fair	Poor	Fair	Fair	Poor

Table 18.--Wildlife Habitat--Continued

Map symbol and soil name	Pct. of map unit	Potential for habitat elements								Potential as habitat for--			
		Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hard- wood trees	Conif- erous plants	Shrubs	Wetland plants	Shallow water areas	Open- land wild- life	Wood- land wild- life	Wetland wild- life	
I15A:													
Garborg-----	10	Poor	Fair	Good	Fair	Fair	Fair	Fair	Fair	Poor	Fair	Fair	Poor
Hamar-----	5	Poor	Good	Fair	Good	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Fair
Ulen-----	5	Fair	Good	Good	Fair	Poor	Fair	Poor	Poor	Poor	Fair	Fair	Poor
Poppleton-----	3	Poor	Fair	Fair	Fair	Fair	Fair	Fair	Poor	Poor	Fair	Fair	Poor
Sandberg-----	3	Poor	Fair	Good	Fair	Fair	Fair	Fair	Very poor	Very poor	Fair	Fair	Very poor
Foldahl-----	2	Fair	Good	Good	Good	Fair	Fair	Fair	Poor	Poor	Good	Fair	Poor
Radium-----	2	Poor	Fair	Good	Fair	Fair	Fair	Fair	Poor	Very poor	Fair	Fair	Very poor
I16F:													
Fluvaquents-----	55	Very poor	Poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Very poor	Poor	Good
Hapludolls-----	25	Good	Good	Good	Good	Good	Fair	Poor	Very poor	Good	Good	Good	Very poor
Hapludalfs-----	7	Poor	Good	Good	Good	Good	Good	Very poor	Very poor	Fair	Good	Good	Very poor
Fairdale-----	5	Fair	Good	Good	Good	Good	Fair	Very poor	Very poor	Good	Good	Good	Very poor
Water-----	5	---	---	---	---	---	---	---	---	---	---	---	---
Bowstring-----	2	Very poor	Poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
Rauville-----	1	Very poor	Poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Very poor	Poor	Good
I17A:													
Foldahl-----	75	Good	Good	Good	Good	Fair	Fair	Fair	Poor	Poor	Good	Fair	Poor
Kratka-----	10	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair

Table 18.--Wildlife Habitat--Continued

Map symbol and soil name	Pct. of map unit	Potential for habitat elements								Potential as habitat for--			
		Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hard- wood trees	Conif- erous plants	Shrubs	Wetland plants	Shallow water areas	Open- land wild- life	Wood- land wild- life	Wetland wild- life	
I17A:													
Roliss-----	5	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Fair	Good	Fair	Fair
Flaming-----	4	Fair	Fair	Good	Fair	Fair	Fair	Fair	Fair	Poor	Fair	Fair	Poor
Grimstad-----	2	Good	Good	Fair	Fair	Fair	Fair	Fair	Poor	Poor	Fair	Fair	Fair
Linveldt-----	2	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Poor	Poor	Fair	Fair	Poor
Eckvoll-----	1	Fair	Fair	Good	Good	Good	Fair	Fair	Poor	Poor	Fair	Good	Poor
Strathcona-----	1	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
I18A:													
Foldahl-----	75	Fair	Good	Good	Good	Fair	Fair	Fair	Poor	Poor	Good	Fair	Poor
Kratka-----	10	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair
Roliss-----	5	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Fair	Good	Fair	Fair
Flaming-----	4	Fair	Fair	Good	Fair	Fair	Fair	Fair	Fair	Poor	Fair	Fair	Poor
Grimstad-----	2	Good	Good	Fair	Fair	Fair	Fair	Fair	Fair	Poor	Fair	Fair	Poor
Linveldt-----	2	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Poor	Poor	Fair	Fair	Poor
Eckvoll-----	1	Fair	Fair	Good	Good	Good	Fair	Fair	Poor	Poor	Fair	Good	Poor
Strathcona-----	1	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
I19A:													
Foxhome-----	65	Good	Good	Good	Fair	Fair	Fair	Fair	Poor	Poor	Good	Fair	Poor
Kittson-----	10	Good	Good	Good	Fair	Fair	Good	Good	Poor	Poor	Good	Fair	Poor
Strandquist-----	10	Fair	Fair	Fair	Fair	Poor	Fair	Fair	Good	Good	Good	Fair	Good
Foldahl-----	5	Good	Good	Good	Good	Fair	Fair	Fair	Poor	Poor	Good	Fair	Poor
Grimstad-----	5	Good	Good	Fair	Fair	Fair	Fair	Fair	Fair	Poor	Fair	Fair	Poor
Roliss-----	3	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Fair	Good	Fair	Fair
Mavie-----	2	Fair	Fair	Fair	Fair	Poor	Fair	Fair	Good	Good	Fair	Fair	Good

Table 18.--Wildlife Habitat--Continued

Map symbol and soil name	Pct. of map unit	Potential for habitat elements								Potential as habitat for--		
		Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hard- wood trees	Conif- erous plants	Shrubs	Wetland plants	Shallow water areas	Open- land wild- life	Wood- land wild- life	Wetland wild- life
I20A:												
Foxlake-----	75	Fair	Fair	Fair	Fair	Fair	Poor	Poor	Good	Good	Fair	Fair
Clearwater-----	5	Poor	Poor	Fair	Fair	Fair	Poor	Good	Good	Good	Fair	Good
Foxlake, very cobbly----	5	Fair	Fair	Fair	Fair	Fair	Poor	Poor	Good	Good	Fair	Fair
Augsburg-----	3	Fair	Good	Fair	Fair	Poor	Fair	Fair	Fair	Good	Fair	Fair
Clearwater, depressiona	3	Poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
Espelie-----	3	Fair	Good	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
Hilaire-----	2	Fair	Good	Good	Fair	Fair	Fair	Poor	Poor	Good	Fair	Poor
Reis-----	2	Fair	Fair	Fair	Poor	Fair	Fair	Good	Good	Fair	Poor	Good
Wheatville-----	2	Good	Good	Good	Fair	Poor	Fair	Poor	Poor	Good	Fair	Poor
I21A:												
Fram-----	85	Good	Good	Good	Good	Good	Good	Fair	Poor	Good	Good	Poor
Hedman-----	12	Good	Good	Fair	Fair	Poor	Fair	Good	Good	Good	Fair	Fair
Strathcona-----	2	Fair	Good	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
Foxhome-----	1	Good	Good	Good	Fair	Fair	Fair	Poor	Poor	Good	Fair	Poor
I22A:												
Glyndon-----	75	Good	Good	Good	Fair	Fair	Fair	Poor	Poor	Good	Fair	Poor
Borup-----	10	Fair	Fair	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
Augsburg-----	5	Fair	Good	Fair	Fair	Poor	Fair	Fair	Fair	Good	Fair	Fair
Ulen-----	5	Fair	Good	Good	Fair	Poor	Fair	Poor	Poor	Fair	Fair	Poor
Wheatville-----	3	Good	Good	Good	Fair	Poor	Fair	Poor	Poor	Good	Fair	Poor
Flaming-----	2	Fair	Fair	Good	Fair	Fair	Fair	Fair	Poor	Fair	Fair	Poor
I23A:												
Glyndon-----	75	Good	Good	Good	Fair	Fair	Fair	Poor	Poor	Good	Fair	Poor

Table 18.--Wildlife Habitat--Continued

Map symbol and soil name	Pct. of map unit	Potential for habitat elements								Potential as habitat for--		
		Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hard- wood trees	Conif- erous plants	Shrubs	Wetland plants	Shallow water areas	Open- land wild- life	Wood- land wild- life	Wetland wild- life
I23A:												
Borup-----	10	Fair	Fair	Fair	Fair	Poor	Fair	Good	Good	Fair	Fair	Good
Augsburg-----	5	Fair	Good	Fair	Fair	Poor	Fair	Fair	Fair	Good	Fair	Fair
Ulen-----	5	Fair	Good	Good	Fair	Poor	Fair	Poor	Poor	Fair	Fair	Poor
Wheatville-----	3	Good	Good	Good	Fair	Poor	Fair	Poor	Poor	Good	Fair	Poor
Flaming-----	2	Fair	Fair	Good	Fair	Fair	Fair	Fair	Poor	Fair	Fair	Poor
I24A:												
Grimstad-----	70	Good	Good	Fair	Fair	Fair	Fair	Fair	Poor	Fair	Fair	Poor
Strathcona-----	12	Fair	Good	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
Foldahl-----	5	Good	Good	Good	Good	Fair	Fair	Poor	Poor	Good	Fair	Poor
Hamerly-----	5	Good	Good	Good	Good	Good	Fair	Poor	Poor	Good	Good	Poor
Foxhome-----	2	Good	Good	Good	Fair	Fair	Fair	Poor	Poor	Good	Fair	Poor
Karlsruhe-----	2	Fair	Good	Good	Fair	Fair	Fair	Fair	Poor	Good	Fair	Poor
Mavie-----	2	Fair	Fair	Fair	Fair	Poor	Fair	Good	Good	Fair	Fair	Good
Ulen-----	2	Fair	Good	Good	Fair	Poor	Fair	Poor	Poor	Fair	Fair	Poor
I25A:												
Hamar-----	75	Poor	Good	Fair	Good	Fair	Fair	Fair	Fair	Fair	Fair	Fair
Garborg-----	10	Poor	Fair	Good	Fair	Fair	Fair	Fair	Poor	Fair	Fair	Poor
Rosewood-----	7	Fair	Fair	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
Venlo-----	3	Very poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
Flaming-----	2	Fair	Fair	Good	Fair	Fair	Fair	Fair	Poor	Fair	Fair	Poor
Hangaard-----	2	Poor	Fair	Fair	Fair	Poor	Poor	Good	Good	Fair	Fair	Good
Kratka-----	1	Fair	Good	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair

Table 18.--Wildlife Habitat--Continued

Map symbol and soil name	Pct. of map unit	Potential for habitat elements								Potential as habitat for--		
		Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hard- wood trees	Conif- erous plants	Shrubs	Wetland plants	Shallow water areas	Open- land wild- life	Wood- land wild- life	Wetland wild- life
I26A:												
Hamerly-----	75	Good	Good	Good	Good	Good	Fair	Poor	Poor	Good	Good	Poor
Vallers-----	12	Fair	Fair	Fair	Fair	Poor	Fair	Good	Good	Good	Fair	Good
Foxhome-----	3	Good	Good	Good	Fair	Fair	Fair	Poor	Poor	Good	Fair	Poor
Grimstad-----	3	Good	Good	Fair	Fair	Fair	Fair	Fair	Poor	Fair	Fair	Poor
Hamerly, very cobbly----	3	Good	Good	Good	Good	Good	Fair	Poor	Poor	Good	Good	Poor
Strathcona-----	3	Fair	Good	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
Roliss, depressional----	1	Poor	Poor	Fair	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
I27A:												
Hamre-----	80	Poor	Fair	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
Northwood-----	5	Very poor	Very poor	Poor	Poor	Poor	Poor	Good	Good	Very poor	Poor	Good
Roliss-----	5	Fair	Good	Fair	Fair	Fair	Fair	Good	Fair	Good	Fair	Fair
Smiley-----	5	Fair	Good	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair
Cathro-----	3	Poor	Fair	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
Kratka-----	2	Fair	Good	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair
I28A:												
Hangaard-----	75	Poor	Fair	Fair	Fair	Poor	Poor	Good	Good	Fair	Fair	Good
Hamar-----	7	Poor	Good	Fair	Good	Fair	Fair	Fair	Fair	Fair	Fair	Fair
Syrene-----	7	Fair	Fair	Fair	Fair	Poor	Fair	Good	Good	Fair	Fair	Good
Karlsruhe-----	3	Fair	Good	Good	Fair	Fair	Fair	Fair	Poor	Good	Fair	Poor
Rosewood-----	3	Fair	Fair	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
Strandquist-----	3	Fair	Fair	Fair	Fair	Poor	Fair	Good	Good	Good	Fair	Good
Deerwood-----	2	Very poor	Very poor	Poor	Poor	Poor	Poor	Good	Good	Very poor	Poor	Good

Table 18.--Wildlife Habitat--Continued

Map symbol and soil name	Pct. of map unit	Potential for habitat elements								Potential as habitat for--		
		Grain and seed crops	Grasses and legumes	Wild herba-ceous plants	Hard-wood trees	Conif-erous plants	Shrubs	Wetland plants	Shallow water areas	Open-land wild-life	Wood-land wild-life	Wetland wild-life
I29A:												
Hattie-----	75	Fair	Good	Fair	Fair	Good	Fair	Very poor	Very poor	Fair	Good	Very poor
Clearwater-----	12	Poor	Poor	Fair	Fair	Fair	Poor	Good	Good	Good	Fair	Good
Reis-----	6	Fair	Fair	Fair	Poor	Fair	Fair	Good	Good	Fair	Poor	Good
Hattie, very cobbly----	5	Fair	Good	Fair	Fair	Good	Fair	Very poor	Very poor	Fair	Good	Very poor
Hilaire-----	2	Good	Good	Good	Fair	Fair	Fair	Poor	Poor	Fair	Fair	Poor
I29D:												
Hattie-----	85	Fair	Good	Fair	Fair	Fair	Fair	Very poor	Very poor	Fair	Good	Very poor
Clearwater-----	6	Poor	Poor	Fair	Fair	Fair	Poor	Good	Good	Good	Fair	Good
Hattie, level-----	5	Fair	Good	Fair	Fair	Good	Fair	Very poor	Very poor	Fair	Good	Very poor
Boyerlake-----	4	Fair	Good	Fair	Poor	Poor	Fair	Very poor	Very poor	Good	Poor	Very poor
I30A:												
Hedman-----	85	Good	Good	Fair	Fair	Poor	Fair	Good	Good	Good	Fair	Fair
Fram-----	5	Good	Good	Good	Good	Good	Good	Fair	Poor	Good	Good	Poor
Strathcona-----	5	Fair	Good	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
Haug-----	3	Very poor	Very poor	Poor	Poor	Poor	Poor	Good	Good	Very poor	Poor	Good
Strandquist-----	2	Fair	Fair	Fair	Fair	Poor	Fair	Good	Good	Good	Fair	Good
I31A:												
Hedman-----	50	Good	Good	Fair	Fair	Poor	Fair	Good	Good	Good	Fair	Fair
Fram-----	40	Good	Good	Good	Good	Good	Good	Fair	Poor	Good	Good	Poor
Strathcona-----	5	Fair	Good	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good

Table 18.--Wildlife Habitat--Continued

Map symbol and soil name	Pct. of map unit	Potential for habitat elements								Potential as habitat for--			
		Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hard- wood trees	Conif- erous plants	Shrubs	Wetland plants	Shallow water areas	Open- land wild- life	Wood- land wild- life	Wetland wild- life	
I31A:													
Haug-----	3	Very poor	Very poor	Poor	Poor	Poor	Poor	Good	Good	Very poor	Poor	Good	
Strandquist-----	2	Fair	Fair	Fair	Fair	Poor	Fair	Good	Good	Good	Fair	Good	
I32A:													
Hilaire-----	75	Good	Good	Good	Fair	Fair	Fair	Poor	Poor	Fair	Fair	Poor	
Espelie-----	12	Fair	Good	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good	
Huot-----	5	Good	Good	Fair	Fair	Fair	Fair	Poor	Poor	Good	Fair	Fair	
Flaming-----	2	Fair	Fair	Good	Fair	Fair	Fair	Fair	Poor	Fair	Fair	Poor	
Foxlake-----	2	Fair	Fair	Fair	Fair	Fair	Poor	Poor	Good	Good	Fair	Fair	
Wheatville-----	2	Good	Good	Good	Fair	Poor	Fair	Poor	Poor	Good	Fair	Poor	
Thiefriver-----	1	Fair	Good	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good	
Wyandotte-----	1	Fair	Fair	Fair	Fair	Poor	Fair	Good	Good	Fair	Fair	Good	
I33A:													
Hilaire-----	75	Fair	Good	Good	Fair	Fair	Fair	Poor	Poor	Good	Fair	Poor	
Espelie-----	12	Fair	Good	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good	
Huot-----	5	Good	Good	Fair	Fair	Fair	Fair	Poor	Poor	Good	Fair	Fair	
Flaming-----	2	Fair	Fair	Good	Fair	Fair	Fair	Fair	Poor	Fair	Fair	Poor	
Foxlake-----	2	Fair	Fair	Fair	Fair	Fair	Poor	Poor	Good	Good	Fair	Fair	
Wheatville-----	2	Good	Good	Good	Fair	Poor	Fair	Poor	Poor	Good	Fair	Poor	
Thiefriver-----	1	Fair	Good	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good	
Wyandotte-----	1	Fair	Fair	Fair	Fair	Poor	Fair	Good	Good	Fair	Fair	Good	
I34A:													
Huot-----	75	Good	Good	Fair	Fair	Fair	Fair	Poor	Poor	Good	Fair	Fair	

Table 18.--Wildlife Habitat--Continued

Map symbol and soil name	Pct. of map unit	Potential for habitat elements								Potential as habitat for--			
		Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hard- wood trees	Conif- erous plants	Shrubs	Wetland plants	Shallow water areas	Open- land wild- life	Wood- land wild- life	Wetland wild- life	
<b>I34A:</b>													
Thiefriver-----	12	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
Hilaire-----	5	Good	Good	Good	Fair	Fair	Fair	Fair	Poor	Poor	Fair	Fair	Poor
Flaming-----	3	Fair	Fair	Good	Fair	Fair	Fair	Fair	Fair	Poor	Fair	Fair	Poor
Foxlake-----	3	Fair	Fair	Fair	Fair	Fair	Fair	Poor	Poor	Good	Good	Fair	Fair
Ulen-----	2	Fair	Good	Good	Fair	Poor	Fair	Fair	Poor	Poor	Fair	Fair	Poor
<b>I35A:</b>													
Karlsruhe-----	70	Fair	Good	Good	Fair	Fair	Fair	Fair	Fair	Poor	Good	Fair	Poor
Syrene-----	10	Fair	Fair	Fair	Fair	Poor	Fair	Fair	Good	Good	Fair	Fair	Good
Ulen-----	10	Fair	Good	Good	Fair	Poor	Fair	Fair	Poor	Poor	Fair	Fair	Poor
Radium-----	5	Poor	Fair	Good	Fair	Fair	Fair	Fair	Poor	Very poor	Fair	Fair	Very poor
Rosewood-----	3	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
Sandberg-----	2	Poor	Fair	Good	Fair	Fair	Fair	Fair	Very poor	Very poor	Fair	Fair	Very poor
<b>I36A:</b>													
Kittson-----	70	Good	Good	Good	Fair	Fair	Good	Good	Poor	Poor	Good	Fair	Poor
Roliss-----	12	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Fair	Good	Fair	Fair
Hamerly-----	5	Good	Good	Good	Good	Good	Fair	Fair	Poor	Poor	Good	Good	Poor
Kratka-----	5	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair
Grimstad-----	3	Good	Good	Fair	Fair	Fair	Fair	Fair	Fair	Poor	Fair	Fair	Poor
Strandquist-----	3	Fair	Fair	Fair	Fair	Poor	Fair	Fair	Good	Good	Good	Fair	Good
Foxhome-----	2	Good	Good	Good	Fair	Fair	Fair	Fair	Poor	Poor	Good	Fair	Poor
<b>I37A:</b>													
Kratka, depressional----	45	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good

Table 18.--Wildlife Habitat--Continued

Map symbol and soil name	Pct. of map unit	Potential for habitat elements								Potential as habitat for--			
		Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hard- wood trees	Conif- erous plants	Shrubs	Wetland plants	Shallow water areas	Open- land wild- life	Wood- land wild- life	Wetland wild- life	
I37A:													
Strathcona, depressional	45	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
Northwood-----	5	Very poor	Very poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Very poor	Poor	Good
Kratka-----	2	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair
Strathcona-----	2	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
Roliss-----	1	Good	Good	Fair	Fair	Fair	Fair	Fair	Good	Fair	Good	Fair	Fair
I38A:													
Kratka-----	70	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair
Smiley-----	7	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair
Foldahl-----	5	Good	Good	Good	Good	Fair	Fair	Fair	Poor	Poor	Good	Fair	Poor
Kratka, very cobbly----	5	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair
Strathcona-----	5	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
Kratka, depressional----	3	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
Strandquist-----	3	Fair	Fair	Fair	Fair	Poor	Fair	Fair	Good	Good	Good	Fair	Good
Linveldt-----	2	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Poor	Poor	Fair	Fair	Poor
I39A:													
Linveldt-----	65	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Poor	Poor	Fair	Fair	Poor
Kratka-----	14	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair
Reiner-----	10	Good	Good	Good	Good	Good	Good	Good	Poor	Poor	Fair	Fair	Poor
Smiley-----	5	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair
Eckvoll-----	3	Fair	Fair	Good	Good	Good	Fair	Fair	Poor	Poor	Fair	Good	Poor
Foldahl-----	2	Good	Good	Good	Good	Fair	Fair	Fair	Poor	Poor	Good	Fair	Poor
Pelan-----	1	Poor	Fair	Fair	Fair	Fair	Fair	Fair	Poor	Poor	Fair	Fair	Poor

Table 18.--Wildlife Habitat--Continued

Map symbol and soil name	Pct. of map unit	Potential for habitat elements								Potential as habitat for--		
		Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hard- wood trees	Conif- erous plants	Shrubs	Wetland plants	Shallow water areas	Open- land wild- life	Wood- land wild- life	Wetland wild- life
<b>I40B:</b>												
Maddock-----	85	Fair	Good	Good	Fair	Fair	Fair	Poor	Very poor	Fair	Fair	Very poor
Flaming-----	5	Fair	Fair	Good	Fair	Fair	Fair	Fair	Poor	Fair	Fair	Poor
Sandberg-----	5	Poor	Fair	Good	Fair	Fair	Fair	Very poor	Very poor	Fair	Fair	Very poor
Halverson-----	3	Fair	Good	Good	Good	Good	---	Very poor	Very poor	Good	Good	Very poor
Hamar-----	2	Poor	Good	Fair	Good	Fair	Fair	Fair	Fair	Fair	Fair	Fair
<b>I40F:</b>												
Maddock-----	90	Very poor	Very poor	Good	Fair	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor
Flaming-----	5	Fair	Fair	Good	Fair	Fair	Fair	Fair	Poor	Fair	Fair	Poor
Sandberg-----	5	Poor	Fair	Good	Fair	Fair	Fair	Very poor	Very poor	Fair	Fair	Very poor
<b>I41A:</b>												
Markey-----	80	Very poor	Very poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
Deerwood-----	12	Very poor	Very poor	Poor	Poor	Poor	Poor	Good	Good	Very poor	Poor	Good
Berner-----	2	Very poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
Hamar-----	2	Poor	Good	Fair	Good	Fair	Fair	Fair	Fair	Fair	Fair	Fair
Seelyeville-----	2	Very poor	Fair	Poor	Poor	Poor	Poor	Good	Good	Good	Poor	Good
Syrene-----	2	Fair	Fair	Fair	Fair	Poor	Fair	Good	Good	Fair	Fair	Good
<b>I42A:</b>												
Markey, ponded-----	85	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Good	Good	Very poor	Very poor	Good

Table 18.--Wildlife Habitat--Continued

Map symbol and soil name	Pct. of map unit	Potential for habitat elements								Potential as habitat for--			
		Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hard- wood trees	Conif- erous plants	Shrubs	Wetland plants	Shallow water areas	Open- land wild- life	Wood- land wild- life	Wetland wild- life	
I42A:													
Markey-----	5	Very poor	Very poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
Deerwood-----	4	Very poor	Very poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Very poor	Poor	Good
Seelyeville, ponded----	4	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Good	Good	Very poor	Very poor	Good
Hamar-----	1	Poor	Good	Fair	Good	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Fair
Hangaard-----	1	Poor	Fair	Fair	Fair	Poor	Poor	Poor	Good	Good	Fair	Fair	Good
I43A:													
Mavie-----	70	Fair	Fair	Fair	Fair	Poor	Fair	Fair	Good	Good	Fair	Fair	Good
Vallers-----	10	Fair	Fair	Fair	Fair	Poor	Fair	Fair	Good	Good	Good	Fair	Good
Strandquist-----	7	Fair	Fair	Fair	Fair	Poor	Fair	Fair	Good	Good	Good	Fair	Good
Strathcona-----	5	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
Strathcona, depressiona	3	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
Foxhome-----	2	Good	Good	Good	Fair	Fair	Fair	Fair	Poor	Poor	Good	Fair	Poor
Karlsruhe-----	2	Fair	Good	Good	Fair	Fair	Fair	Fair	Fair	Poor	Good	Fair	Poor
Grimstad-----	1	Good	Good	Fair	Fair	Fair	Fair	Fair	Fair	Poor	Fair	Fair	Poor
I44A:													
Newfolden-----	75	Good	Good	Good	Good	Fair	Good	Good	Poor	Poor	Good	Fair	Poor
Smiley-----	12	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair
Boash-----	8	Fair	Fair	Fair	Fair	Poor	Poor	Poor	Good	Good	Fair	Fair	Good
Linveltdt-----	4	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Poor	Poor	Fair	Fair	Poor
Hapludolls-----	1	Good	Good	Good	Good	Good	Good	Fair	Poor	Very poor	Good	Good	Very poor

Table 18.--Wildlife Habitat--Continued

Map symbol and soil name	Pct. of map unit	Potential for habitat elements								Potential as habitat for--			
		Grain and seed crops	Grasses and legumes	Wild herba-ceous plants	Hard-wood trees	Conif-erous plants	Shrubs	Wetland plants	Shallow water areas	Open-land wild-life	Wood-land wild-life	Wetland wild-life	
I45A:													
Northwood-----	75	Very poor	Very poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Very poor	Poor	Good
Hamre-----	10	Poor	Fair	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
Berner-----	5	Very poor	Poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
Kratka-----	5	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair
Strandquist-----	3	Fair	Fair	Fair	Fair	Poor	Fair	Fair	Good	Good	Good	Fair	Good
Roliss-----	2	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Fair	Good	Fair	Fair
I46A:													
Pits-----	85	---	---	---	---	---	---	---	---	---	---	---	---
Udipsamments-----	10	Very poor	Poor	Poor	Poor	Poor	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor
Radium-----	2	Poor	Fair	Good	Fair	Fair	Fair	Fair	Poor	Very poor	Fair	Fair	Very poor
Maddock-----	1	Fair	Good	Good	Fair	Fair	Fair	Fair	Poor	Very poor	Fair	Fair	Very poor
Marquette-----	1	Poor	Fair	Fair	Fair	Fair	Fair	Poor	Very poor	Very poor	Poor	Poor	Very poor
Sandberg-----	1	Poor	Fair	Good	Fair	Fair	Fair	Fair	Very poor	Very poor	Fair	Fair	Very poor
I47A:													
Poppleton-----	75	Poor	Fair	Fair	Fair	Fair	Fair	Fair	Poor	Poor	Fair	Fair	Poor
Flaming-----	12	Fair	Fair	Good	Fair	Fair	Fair	Fair	Fair	Poor	Fair	Fair	Poor
Garborg-----	5	Poor	Fair	Good	Fair	Fair	Fair	Fair	Fair	Poor	Fair	Fair	Poor
Hamar-----	3	Poor	Good	Fair	Good	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Fair
Radium-----	2	Poor	Fair	Good	Fair	Fair	Fair	Fair	Poor	Very poor	Fair	Fair	Very poor

Table 18.--Wildlife Habitat--Continued

Map symbol and soil name	Pct. of map unit	Potential for habitat elements								Potential as habitat for--			
		Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hard- wood trees	Conif- erous plants	Shrubs	Wetland plants	Shallow water areas	Open- land wild- life	Wood- land wild- life	Wetland wild- life	
I47A:													
Ulen-----	2	Fair	Good	Good	Fair	Poor	Fair	Poor	Poor	Fair	Fair	Poor	
Maddock-----	1	Fair	Good	Good	Fair	Fair	Fair	Poor	Very poor	Fair	Fair	Very poor	
I48A:													
Radium-----	75	Poor	Fair	Good	Fair	Fair	Fair	Poor	Very poor	Fair	Fair	Very poor	
Sandberg-----	7	Poor	Fair	Good	Fair	Fair	Fair	Very poor	Very poor	Fair	Fair	Very poor	
Oylen-----	5	Fair	Good	Good	Good	Good	Fair	Poor	Poor	Good	Good	Poor	
Flaming-----	4	Fair	Fair	Good	Fair	Fair	Fair	Fair	Poor	Fair	Fair	Poor	
Garborg-----	3	Poor	Fair	Good	Fair	Fair	Fair	Fair	Poor	Fair	Fair	Poor	
Hangaard-----	3	Poor	Fair	Fair	Fair	Poor	Poor	Good	Good	Fair	Fair	Good	
Hamar-----	2	Poor	Good	Fair	Good	Fair	Fair	Fair	Fair	Fair	Fair	Fair	
Poppleton-----	1	Poor	Fair	Fair	Fair	Fair	Fair	Poor	Poor	Fair	Fair	Poor	
I49A:													
Rauville-----	80	Very poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Very poor	Poor	Good	
Fluvaquents-----	12	Very poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Very poor	Poor	Good	
Water-----	5	---	---	---	---	---	---	---	---	---	---	---	
Lamoure-----	3	Poor	Fair	Fair	Poor	Poor	Fair	Good	Good	Fair	Poor	Good	
I50A:													
Reiner-----	70	Good	Good	Good	Good	Good	Good	Poor	Poor	Fair	Fair	Poor	
Smiley-----	12	Fair	Good	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair	
Reiner, very cobbly----	7	Good	Good	Good	Good	Good	Good	Poor	Poor	Fair	Fair	Poor	

Table 18.--Wildlife Habitat--Continued

Map symbol and soil name	Pct. of map unit	Potential for habitat elements								Potential as habitat for--			
		Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hard- wood trees	Conif- erous plants	Shrubs	Wetland plants	Shallow water areas	Open- land wild- life	Wood- land wild- life	Wetland wild- life	
I50A:													
Linveltdt-----	5	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Poor	Poor	Fair	Fair	Poor
Eckvoll-----	3	Fair	Fair	Good	Good	Good	Fair	Fair	Poor	Poor	Fair	Good	Poor
Kratka-----	3	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair
I51A:													
Reiner-----	65	Good	Good	Good	Good	Good	Good	Good	Poor	Poor	Fair	Fair	Poor
Smiley-----	9	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair
Reiner fine sandy loam--	8	Good	Good	Good	Good	Good	Good	Good	Poor	Poor	Fair	Fair	Poor
Linveltdt-----	7	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Poor	Poor	Fair	Fair	Poor
Kratka-----	5	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair
Eckvoll-----	3	Fair	Fair	Good	Good	Good	Fair	Fair	Poor	Poor	Fair	Good	Poor
Reiner, very cobbly----	3	Good	Good	Good	Good	Good	Good	Good	Poor	Poor	Fair	Fair	Poor
I52A:													
Reis-----	55	Fair	Fair	Fair	Poor	Fair	Fair	Fair	Good	Good	Fair	Poor	Good
Clearwater-----	30	Poor	Poor	Fair	Fair	Fair	Poor	Poor	Good	Good	Good	Fair	Good
Clearwater, very cobbly	5	Poor	Poor	Fair	Fair	Fair	Poor	Poor	Good	Good	Good	Fair	Good
Clearwater, depressional	3	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
Espelie-----	3	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
Hattie-----	3	Fair	Good	Fair	Fair	Good	Fair	Fair	Very poor	Very poor	Fair	Good	Very poor
Wyandotte-----	1	Fair	Fair	Fair	Fair	Poor	Fair	Fair	Good	Good	Fair	Fair	Good
I53A:													
Roliss-----	75	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Fair	Good	Fair	Fair
Kratka-----	8	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair

Table 18.--Wildlife Habitat--Continued

Map symbol and soil name	Pct. of map unit	Potential for habitat elements								Potential as habitat for--			
		Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hard- wood trees	Conif- erous plants	Shrubs	Wetland plants	Shallow water areas	Open- land wild- life	Wood- land wild- life	Wetland wild- life	
I53A:													
Roliss, very cobbly-----	7	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Fair	Good	Fair	Fair
Kittson-----	5	Good	Good	Good	Fair	Fair	Good	Poor	Poor	Good	Fair	Poor	
Roliss, depressional----	3	Poor	Poor	Fair	Poor	Poor	Poor	Good	Good	Poor	Poor	Good	
Smiley-----	2	Fair	Good	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair	Fair
I54A:													
Roliss, depressional----	80	Poor	Poor	Fair	Poor	Poor	Poor	Good	Good	Poor	Poor	Good	
Roliss-----	12	Fair	Good	Fair	Fair	Fair	Fair	Good	Fair	Good	Fair	Fair	Fair
Hamre-----	5	Poor	Fair	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good	
Kratka-----	3	Fair	Good	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair	Fair
I55A:													
Rosewood-----	75	Fair	Fair	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good	
Ulen-----	10	Fair	Good	Good	Fair	Poor	Fair	Poor	Poor	Fair	Fair	Poor	
Hamar-----	6	Poor	Good	Fair	Good	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Fair
Rosewood, depressional--	3	Very poor	Very poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good	
Syrene-----	3	Fair	Fair	Fair	Fair	Poor	Fair	Good	Good	Fair	Fair	Good	
Karlsruhe-----	1	Fair	Good	Good	Fair	Fair	Fair	Fair	Poor	Good	Fair	Poor	
Strathcona-----	1	Fair	Good	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good	
Thiefriver-----	1	Fair	Good	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good	
I56A:													
Rosewood-----	50	Fair	Fair	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good	
Venlo-----	40	Very poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good	
Deerwood-----	3	Very poor	Very poor	Poor	Poor	Poor	Poor	Good	Good	Very poor	Poor	Good	

Table 18.--Wildlife Habitat--Continued

Map symbol and soil name	Pct. of map unit	Potential for habitat elements								Potential as habitat for--		
		Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hard- wood trees	Conif- erous plants	Shrubs	Wetland plants	Shallow water areas	Open- land wild- life	Wood- land wild- life	Wetland wild- life
I56A:												
Syrene-----	3	Fair	Fair	Fair	Fair	Poor	Fair	Good	Good	Fair	Fair	Good
Ulen-----	2	Fair	Good	Good	Fair	Poor	Fair	Poor	Poor	Fair	Fair	Poor
Strathcona-----	1	Fair	Good	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
Thiefriver-----	1	Fair	Good	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
I57B:												
Sandberg-----	50	Poor	Fair	Good	Fair	Fair	Fair	Very poor	Very poor	Fair	Fair	Very poor
Radium-----	25	Poor	Fair	Good	Fair	Fair	Fair	Poor	Very poor	Fair	Fair	Very poor
Sioux-----	8	Very poor	Very poor	Poor	Poor	Very poor	Poor	Very poor	Very poor	Very poor	Very poor	Very poor
Oylen-----	7	Good	Good	Good	Good	Good	Fair	Poor	Poor	Good	Good	Poor
Flaming-----	5	Fair	Fair	Good	Fair	Fair	Fair	Fair	Poor	Fair	Fair	Poor
Garborg-----	5	Poor	Fair	Good	Fair	Fair	Fair	Fair	Poor	Fair	Fair	Poor
I58A:												
Seelyeville-----	90	Very poor	Fair	Poor	Poor	Poor	Poor	Good	Good	Good	Poor	Good
Cathro-----	3	Poor	Fair	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
Dora-----	3	Very poor	Very poor	Very poor	Poor	Poor	Poor	Good	Good	Very poor	Poor	Good
Markey-----	3	Very poor	Very poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
Berner-----	1	Very poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
I59A:												
Smiley-----	65	Fair	Good	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair

Table 18.--Wildlife Habitat--Continued

Map symbol and soil name	Pct. of map unit	Potential for habitat elements								Potential as habitat for--			
		Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hard- wood trees	Conif- erous plants	Shrubs	Wetland plants	Shallow water areas	Open- land wild- life	Wood- land wild- life	Wetland wild- life	
I59A:													
Smiley, very cobbly-----	10	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair
Kratka-----	9	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair
Roliss-----	5	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Fair	Good	Fair	Fair
Reiner-----	4	Good	Good	Good	Good	Good	Good	Good	Poor	Poor	Fair	Fair	Poor
Linveldt-----	3	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Poor	Poor	Fair	Fair	Poor
Smiley, depressiona-----	3	Poor	Poor	Fair	Poor	Poor	Poor	Poor	Good	Poor	Poor	Poor	Good
Strandquist-----	1	Fair	Fair	Fair	Fair	Poor	Fair	Fair	Good	Good	Good	Fair	Good
I60A:													
Smiley, depressiona-----	80	Poor	Poor	Fair	Poor	Poor	Poor	Poor	Good	Poor	Poor	Poor	Good
Smiley-----	10	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair
Hamre-----	5	Poor	Fair	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
Kratka-----	5	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair
I61A:													
Strandquist-----	70	Fair	Fair	Fair	Fair	Poor	Fair	Fair	Good	Good	Good	Fair	Good
Mavie-----	8	Fair	Fair	Fair	Fair	Poor	Fair	Fair	Good	Good	Fair	Fair	Good
Roliss-----	7	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Fair	Good	Fair	Fair
Kratka-----	5	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair
Foxhome-----	4	Good	Good	Good	Fair	Fair	Fair	Fair	Poor	Poor	Good	Fair	Poor
Hangaard-----	3	Poor	Fair	Fair	Fair	Poor	Poor	Poor	Good	Good	Fair	Fair	Good
Northwood-----	3	Very poor	Very poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Very poor	Poor	Good
I62A:													
Syrene-----	70	Fair	Fair	Fair	Fair	Poor	Fair	Fair	Good	Good	Fair	Fair	Good

Table 18.--Wildlife Habitat--Continued

Map symbol and soil name	Pct. of map unit	Potential for habitat elements								Potential as habitat for--			
		Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hard- wood trees	Conif- erous plants	Shrubs	Wetland plants	Shallow water areas	Open- land wild- life	Wood- land wild- life	Wetland wild- life	
I62A:													
Rosewood-----	11	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
Hangaard-----	5	Poor	Fair	Fair	Fair	Poor	Poor	Poor	Good	Good	Fair	Fair	Good
Karlsruhe-----	4	Fair	Good	Good	Fair	Fair	Fair	Fair	Fair	Poor	Good	Fair	Poor
Deerwood-----	3	Very poor	Very poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Very poor	Poor	Good
Hamar-----	3	Poor	Good	Fair	Good	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Fair
Strandquist-----	2	Fair	Fair	Fair	Fair	Poor	Fair	Fair	Good	Good	Good	Fair	Good
Radium-----	1	Poor	Fair	Good	Fair	Fair	Fair	Fair	Poor	Very poor	Fair	Fair	Very poor
Wyandotte-----	1	Fair	Fair	Fair	Fair	Poor	Fair	Fair	Good	Good	Fair	Fair	Good
I63A:													
Thiefriever-----	70	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
Espelie-----	10	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
Foxlake-----	7	Fair	Fair	Fair	Fair	Fair	Poor	Poor	Poor	Good	Good	Fair	Fair
Huot-----	5	Good	Good	Fair	Fair	Fair	Fair	Fair	Poor	Poor	Good	Fair	Fair
Clearwater, depressional	3	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
Rosewood-----	3	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
Ulen-----	1	Fair	Good	Good	Fair	Poor	Fair	Fair	Poor	Poor	Fair	Fair	Poor
Wyandotte-----	1	Fair	Fair	Fair	Fair	Poor	Fair	Fair	Good	Good	Fair	Fair	Good
I64A:													
Ulen-----	70	Fair	Good	Good	Fair	Poor	Fair	Fair	Poor	Poor	Fair	Fair	Poor
Rosewood-----	10	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
Flaming-----	8	Fair	Fair	Good	Fair	Fair	Fair	Fair	Fair	Poor	Fair	Fair	Poor

Table 18.--Wildlife Habitat--Continued

Map symbol and soil name	Pct. of map unit	Potential for habitat elements								Potential as habitat for--			
		Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hard- wood trees	Conif- erous plants	Shrubs	Wetland plants	Shallow water areas	Open- land wild- life	Wood- land wild- life	Wetland wild- life	
I64A:													
Karlsruhe-----	5	Fair	Good	Good	Fair	Fair	Fair	Fair	Fair	Poor	Good	Fair	Poor
Radium-----	3	Poor	Fair	Good	Fair	Fair	Fair	Fair	Poor	Very poor	Fair	Fair	Very poor
Strathcona-----	2	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
Thiefriever-----	2	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
I65A:													
Ulen-----	70	Fair	Good	Good	Fair	Poor	Fair	Fair	Poor	Poor	Fair	Fair	Poor
Rosewood-----	10	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
Flaming-----	6	Fair	Fair	Good	Fair	Fair	Fair	Fair	Fair	Poor	Fair	Fair	Poor
Poppleton-----	4	Poor	Fair	Fair	Fair	Fair	Fair	Fair	Poor	Poor	Fair	Fair	Poor
Karlsruhe-----	3	Fair	Good	Good	Fair	Fair	Fair	Fair	Fair	Poor	Good	Fair	Poor
Radium-----	3	Poor	Fair	Good	Fair	Fair	Fair	Fair	Poor	Very poor	Fair	Fair	Very poor
Strathcona-----	2	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
Thiefriever-----	2	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
I66A:													
Vallers-----	75	Fair	Fair	Fair	Fair	Poor	Fair	Fair	Good	Good	Good	Fair	Good
Vallers, very cobbly----	7	Fair	Fair	Fair	Fair	Poor	Fair	Fair	Good	Good	Good	Fair	Good
Hamerly-----	6	Good	Good	Good	Good	Good	Fair	Fair	Poor	Poor	Good	Good	Poor
Grimstad-----	3	Good	Good	Fair	Fair	Fair	Fair	Fair	Fair	Poor	Fair	Fair	Poor
Mavie-----	3	Fair	Fair	Fair	Fair	Poor	Fair	Fair	Good	Good	Fair	Fair	Good
Roliss, depressional----	3	Poor	Poor	Fair	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
Strathcona-----	3	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good

Table 18.--Wildlife Habitat--Continued

Map symbol and soil name	Pct. of map unit	Potential for habitat elements								Potential as habitat for--		
		Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hard- wood trees	Conif- erous plants	Shrubs	Wetland plants	Shallow water areas	Open- land wild- life	Wood- land wild- life	Wetland wild- life
<b>I67A:</b>												
Wheatville-----	70	Good	Good	Good	Fair	Poor	Fair	Poor	Poor	Good	Fair	Poor
Augsburg-----	13	Fair	Good	Fair	Fair	Poor	Fair	Fair	Fair	Good	Fair	Fair
Glyndon-----	8	Good	Good	Good	Fair	Fair	Fair	Poor	Poor	Good	Fair	Poor
Foxlake-----	5	Fair	Fair	Fair	Fair	Fair	Poor	Poor	Good	Good	Fair	Fair
Hilaire-----	2	Fair	Good	Good	Fair	Fair	Fair	Poor	Poor	Good	Fair	Poor
Ulen-----	2	Fair	Good	Good	Fair	Poor	Fair	Poor	Poor	Fair	Fair	Poor
<b>I68A:</b>												
Wheatville-----	70	Good	Good	Good	Fair	Poor	Fair	Poor	Poor	Good	Fair	Poor
Augsburg-----	13	Fair	Good	Fair	Fair	Poor	Fair	Fair	Fair	Good	Fair	Fair
Glyndon-----	8	Good	Good	Good	Fair	Fair	Fair	Poor	Poor	Good	Fair	Poor
Foxlake-----	5	Fair	Fair	Fair	Fair	Fair	Poor	Poor	Good	Good	Fair	Fair
Hilaire-----	2	Fair	Good	Good	Fair	Fair	Fair	Poor	Poor	Good	Fair	Poor
Ulen-----	2	Fair	Good	Good	Fair	Poor	Fair	Poor	Poor	Fair	Fair	Poor
<b>I69A:</b>												
Wyandotte-----	65	Fair	Fair	Fair	Fair	Poor	Fair	Good	Good	Fair	Fair	Good
Foxlake-----	10	Fair	Fair	Fair	Fair	Fair	Poor	Poor	Good	Good	Fair	Fair
Espelie-----	8	Fair	Good	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
Clearwater, depressional	5	Poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
Thiefriever-----	5	Fair	Good	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
Karlsruhe-----	4	Fair	Good	Good	Fair	Fair	Fair	Fair	Poor	Good	Fair	Poor
Syrene-----	3	Fair	Fair	Fair	Fair	Poor	Fair	Good	Good	Fair	Fair	Good

Table 18.--Wildlife Habitat--Continued

Map symbol and soil name	Pct. of map unit	Potential for habitat elements								Potential as habitat for--			
		Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hard- wood trees	Conif- erous plants	Shrubs	Wetland plants	Shallow water areas	Open- land wild- life	Wood- land wild- life	Wetland wild- life	
I70A:													
Strathcona-----	70	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
Kratka-----	10	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair
Roliss-----	6	Fair	Good	Fair	Fair	Fair	Fair	Fair	Good	Fair	Good	Fair	Fair
Grimstad-----	5	Good	Good	Fair	Fair	Fair	Fair	Fair	Fair	Poor	Fair	Fair	Poor
Mavie-----	3	Fair	Fair	Fair	Fair	Poor	Fair	Fair	Good	Good	Fair	Fair	Good
Rosewood-----	3	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
Strathcona, depressional	3	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
M-W. Miscellaneous water													
W. Water													

Table 19a.--Building Site Development

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>E109A:</b>							
Bowstring-----	45	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Content of organic matter	1.00	Content of organic matter	1.00	Content of organic matter	1.00
Fluvaquents-----	40	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Hapludalfs-----	5	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Depth to saturated zone	1.00	Shrink-swell	0.50
		Depth to saturated zone	0.01			Depth to saturated zone	0.01
Seelyeville-----	5	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Content of organic matter	1.00	Content of organic matter	1.00	Content of organic matter	1.00
Water-----	5	Not rated		Not rated		Not rated	
<b>E200A:</b>							
Garnes-----	70	Somewhat limited		Very limited		Somewhat limited	
		Depth to saturated zone	0.01	Depth to saturated zone	1.00	Depth to saturated zone	0.01
Chilgren-----	13	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
Eckvoll-----	5	Somewhat limited		Very limited		Somewhat limited	
		Depth to saturated zone	0.01	Depth to saturated zone	1.00	Depth to saturated zone	0.01
Garnes, very stony--	5	Somewhat limited		Very limited		Somewhat limited	
		Depth to saturated zone	0.01	Depth to saturated zone	1.00	Depth to saturated zone	0.01

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
E200A:							
Grygla-----	4	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Pelan-----	3	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
E201A:							
Chilgren-----	75	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Garnes-----	9	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
Grygla-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Grygla, depressional	5	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Hamre-----	5	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Pelan-----	1	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
E202A:							
Cathro-----	80	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Hamre-----	8	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Chilgren-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Northwood-----	3	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>E202A:</b>							
Berner-----	2	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00
Grygla-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00 1.00
Seelyeville-----	2	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00
<b>E203A:</b>							
Northwood-----	75	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Hamre-----	10	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Grygla-----	7	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Berner-----	5	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00
Chilgren-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
<b>E204A:</b>							
Roliss-----	75	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Grygla-----	8	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>E204A:</b>							
Chilgren-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Garnes-----	5	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
Roliss, depressional	5	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Hamre-----	2	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
<b>E205A:</b>							
Berner-----	80	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00
Northwood-----	7	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Grygla-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Cathro-----	3	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Hamre-----	3	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Seelyeville-----	2	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00
<b>E206A:</b>							
Hamre-----	80	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>B206A:</b>							
Chilgren-----	8	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Northwood-----	5	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Cathro-----	3	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Grygla-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Roliss-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
<b>I1A:</b>							
Augsburg-----	75	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Borup-----	10	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Foxlake-----	5	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00
Augsburg, depressional-----	3	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone Shrink-swell	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Wheatville-----	3	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Shrink-swell	1.00	Very limited Depth to saturated zone	1.00
Glyndon-----	2	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I1A:							
Espelie-----	1	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00
Hattie-----	1	Very limited Shrink-swell Depth to saturated zone	1.00 0.20	Very limited Depth to saturated zone Shrink-swell	1.00 1.00	Very limited Shrink-swell Depth to saturated zone	1.00 0.20
I2A:							
Augsburg-----	75	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Borup-----	10	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Foxlake-----	5	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00
Augsburg, depressional-----	3	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone Shrink-swell	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Wheatville-----	3	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Shrink-swell	1.00 1.00	Very limited Depth to saturated zone	1.00
Glyndon-----	2	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Espelie-----	1	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00
Hattie-----	1	Very limited Shrink-swell Depth to saturated zone	1.00 0.20	Very limited Depth to saturated zone Shrink-swell	1.00 1.00	Very limited Shrink-swell Depth to saturated zone	1.00 0.20

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>I3A:</b>							
Berner-----	80	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00
Northwood-----	7	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Kratka-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Hamre-----	3	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Strathcona-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Seelyeville-----	2	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00
<b>I4A:</b>							
Berner-----	30	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00
Rosewood, depressional-----	30	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Strathcona, depressional-----	30	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Rosewood-----	4	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>I4A:</b>							
Deerwood-----	2	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Mavie-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Strathcona-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
<b>I5A:</b>							
Borup-----	75	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Glyndon-----	9	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Rosewood-----	8	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Augsburg-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00 1.00
Augsburg, depressional-----	3	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone Shrink-swell	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
<b>I6A:</b>							
Borup-----	75	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Glyndon-----	9	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Rosewood-----	8	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I6A: Augsburg-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00 1.00
Augsburg, depressional-----	3	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone Shrink-swell	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00 1.00
I7A: Bowstring-----	45	Very limited Ponding Flooding Depth to saturated zone Content of organic matter	1.00 1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone Content of organic matter	1.00 1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone Content of organic matter	1.00 1.00 1.00 1.00
Fluvaquents-----	45	Very limited Ponding Flooding Depth to saturated zone	1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone	1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone	1.00 1.00 1.00
Hapludolls-----	5	Very limited Flooding Slope	1.00 0.63	Very limited Flooding Slope	1.00 0.63	Very limited Flooding Slope	1.00 1.00
Water-----	5	Not rated		Not rated		Not rated	
I8A: Cathro-----	80	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Hamre-----	8	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Northwood-----	3	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Roliss-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>I8A:</b>							
Berner-----	2	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00
Kratka-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00 1.00
Seelyeville-----	2	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00
<b>I9A:</b>							
Clearwater-----	80	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00
Clearwater, very cobble-----	5	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00
Reis-----	5	Very limited Depth to saturated zone Shrink-swell	1.00 1.00	Very limited Depth to saturated zone Shrink-swell	1.00 1.00	Very limited Depth to saturated zone Shrink-swell	1.00 1.00
Clearwater, depressional-----	3	Very limited Ponding Depth to saturated zone Shrink-swell	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Shrink-swell	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Shrink-swell	1.00 1.00 1.00
Espelie-----	3	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00
Foxlake-----	2	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I9A:							
Hattie-----	1	Very limited Shrink-swell Depth to saturated zone	1.00 0.20	Very limited Depth to saturated zone Shrink-swell	1.00 1.00	Very limited Shrink-swell Depth to saturated zone	1.00 0.20
Huot-----	1	Somewhat limited Depth to saturated zone	0.01	Very limited Shrink-swell Depth to saturated zone	1.00 1.00	Somewhat limited Depth to saturated zone	0.01
I10A:							
Clearwater, depressional-----	85	Very limited Ponding Depth to saturated zone Shrink-swell	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Shrink-swell	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Shrink-swell	1.00 1.00 1.00
Clearwater-----	9	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00
Augsburg, depressional-----	3	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone Shrink-swell	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Reis-----	2	Very limited Depth to saturated zone Shrink-swell	1.00 1.00	Very limited Depth to saturated zone Shrink-swell	1.00 1.00	Very limited Depth to saturated zone Shrink-swell	1.00 1.00
Espelie-----	1	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00
I11A:							
Deerwood-----	85	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Rosewood-----	6	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Markey-----	3	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I11A:							
Strathcona-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Syrene-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Venlo-----	2	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
I12A:							
Eckvoll-----	70	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
Kratka-----	8	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Smiley-----	7	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Linveltdt-----	5	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
Reiner-----	5	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
Foldahl-----	2	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
Pelan-----	2	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
Poppleton-----	1	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
I13A:							
Espelie-----	75	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>I13A:</b>							
Foxlake-----	8	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00
Hilaire-----	7	Somewhat limited Depth to saturated zone	0.01	Very limited Shrink-swell Depth to saturated zone	1.00 1.00	Somewhat limited Depth to saturated zone	0.01
Clearwater, depressional-----	5	Very limited Ponding Depth to saturated zone Shrink-swell	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Shrink-swell	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Shrink-swell	1.00 1.00 1.00
Thiefriever-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
<b>I14B:</b>							
Fairdale-----	85	Very limited Flooding Shrink-swell Depth to saturated zone	1.00 0.50 0.01	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 0.50	Very limited Flooding Shrink-swell Depth to saturated zone	1.00 0.50 0.01
Fluvaquents-----	6	Very limited Ponding Flooding Depth to saturated zone	1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone	1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone	1.00 1.00 1.00
Hapludolls-----	5	Very limited Flooding Slope	1.00 0.63	Very limited Flooding Slope	1.00 0.63	Very limited Flooding Slope	1.00 1.00
Hapludalfs-----	2	Very limited Flooding Slope Shrink-swell Depth to saturated zone	1.00 1.00 0.50 0.01	Very limited Flooding Slope Depth to saturated zone	1.00 1.00 1.00	Very limited Flooding Slope Shrink-swell Depth to saturated zone	1.00 1.00 0.50 0.01
Zell-----	2	Somewhat limited Slope	0.84	Somewhat limited Slope	0.84	Very limited Slope	1.00
<b>I14D:</b>							
Fairdale-----	85	Very limited Flooding Shrink-swell Slope Depth to saturated zone	1.00 0.50 0.37 0.01	Very limited Flooding Depth to saturated zone Shrink-swell Slope	1.00 1.00 0.50 0.37	Very limited Flooding Slope Shrink-swell Depth to saturated zone	1.00 1.00 0.50 0.01

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I14D:							
Fluvaquents-----	6	Very limited Ponding Flooding Depth to saturated zone	1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone	1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone	1.00 1.00 1.00
Hapludolls-----	4	Very limited Flooding Slope	1.00 0.63	Very limited Flooding Slope	1.00 0.63	Very limited Flooding Slope	1.00 1.00
Zell-----	3	Somewhat limited Slope	0.84	Somewhat limited Slope	0.84	Very limited Slope	1.00
Hapludalfs-----	2	Very limited Flooding Slope Shrink-swell Depth to saturated zone	1.00 1.00 0.50 0.01	Very limited Flooding Slope Depth to saturated zone	1.00 1.00 1.00	Very limited Flooding Slope Shrink-swell Depth to saturated zone	1.00 1.00 0.50 0.01
I15A:							
Flaming-----	70	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
Garborg-----	10	Somewhat limited Depth to saturated zone	0.99	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	0.99
Hamar-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Ulen-----	5	Somewhat limited Depth to saturated zone	0.44	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.44
Poppleton-----	3	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
Sandberg-----	3	Not limited		Not limited		Not limited	
Foldahl-----	2	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
Radium-----	2	Not limited		Somewhat limited Depth to saturated zone	0.96	Not limited	
I16F:							
Fluvaquents-----	55	Very limited Ponding Flooding Depth to saturated zone	1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone	1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone	1.00 1.00 1.00

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I16F:							
Hapludolls-----	25	Very limited Flooding Slope	 1.00 0.63	Very limited Flooding Slope	 1.00 0.63	Very limited Flooding Slope	 1.00 1.00
Hapludalfs-----	7	Very limited Flooding Slope Shrink-swell Depth to saturated zone	 1.00 1.00 0.50 0.01	Very limited Flooding Slope Depth to saturated zone	 1.00 1.00 1.00	Very limited Flooding Slope Shrink-swell Depth to saturated zone	 1.00 1.00 0.50 0.01
Fairdale-----	5	Very limited Flooding Shrink-swell Slope Depth to saturated zone	 1.00 0.50 0.37 0.01	Very limited Flooding Depth to saturated zone Shrink-swell Slope	 1.00 1.00 0.50 0.37	Very limited Flooding Slope Shrink-swell Depth to saturated zone	 1.00 1.00 0.50 0.01
Water-----	5	Not rated		Not rated		Not rated	
Bowstring-----	2	Very limited Ponding Flooding Depth to saturated zone Content of organic matter	 1.00 1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone Content of organic matter	 1.00 1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone Content of organic matter	 1.00 1.00 1.00 1.00
Rauville-----	1	Very limited Ponding Flooding Depth to saturated zone Shrink-swell	 1.00 1.00 1.00 0.50	Very limited Ponding Flooding Depth to saturated zone Shrink-swell	 1.00 1.00 1.00 0.50	Very limited Ponding Flooding Depth to saturated zone Shrink-swell	 1.00 1.00 1.00 0.50
I17A:							
Foldahl-----	75	Somewhat limited Depth to saturated zone	 0.01	Very limited Depth to saturated zone	 1.00	Somewhat limited Depth to saturated zone	 0.01
Kratka-----	10	Very limited Depth to saturated zone Ponding	 1.00 1.00	Very limited Depth to saturated zone Ponding	 1.00 1.00	Very limited Depth to saturated zone Ponding	 1.00 1.00
Roliss-----	5	Very limited Depth to saturated zone Ponding	 1.00 1.00	Very limited Depth to saturated zone Ponding	 1.00 1.00	Very limited Depth to saturated zone Ponding	 1.00 1.00
Flaming-----	4	Somewhat limited Depth to saturated zone	 0.01	Very limited Depth to saturated zone	 1.00	Somewhat limited Depth to saturated zone	 0.01
Grimstad-----	2	Somewhat limited Depth to saturated zone	 0.99	Very limited Depth to saturated zone	 1.00	Very limited Depth to saturated zone	 0.99

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I17A:							
Linveldt-----	2	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
Eckvoll-----	1	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
Strathcona-----	1	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
I18A:							
Foldahl-----	75	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
Kratka-----	10	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Roliss-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Flaming-----	4	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
Grimstad-----	2	Somewhat limited Depth to saturated zone	0.99	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	0.99
Linveldt-----	2	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
Eckvoll-----	1	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
Strathcona-----	1	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
I19A:							
Foxhome-----	65	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
Kittson-----	10	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I19A:							
Strandquist-----	10	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Foldahl-----	5	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
Grimstad-----	5	Somewhat limited Depth to saturated zone	0.99	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	0.99
Roliss-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Mavie-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
I20A:							
Foxlake-----	75	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00
Clearwater-----	5	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00
Foxlake, very cobbly	5	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00
Augsburg-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Clearwater, depressional-----	3	Very limited Ponding Depth to saturated zone Shrink-swell	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Shrink-swell	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Shrink-swell	1.00 1.00 1.00

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I20A:							
Espelie-----	3	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00
Hilaire-----	2	Somewhat limited Depth to saturated zone	0.01	Very limited Shrink-swell Depth to saturated zone	1.00 1.00	Somewhat limited Depth to saturated zone	0.01
Reis-----	2	Very limited Depth to saturated zone Shrink-swell	1.00 1.00	Very limited Depth to saturated zone Shrink-swell	1.00 1.00	Very limited Depth to saturated zone Shrink-swell	1.00 1.00
Wheatville-----	2	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Shrink-swell	1.00 1.00	Very limited Depth to saturated zone	1.00
I21A:							
Fram-----	85	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
Hedman-----	12	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Strathcona-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Foxhome-----	1	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
I22A:							
Glyndon-----	75	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Borup-----	10	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Augsburg-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Ulen-----	5	Somewhat limited Depth to saturated zone	0.44	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.44

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I22A: Wheatville-----	3	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Shrink-swell	1.00 1.00	Very limited Depth to saturated zone	1.00
Flaming-----	2	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
I23A: Glyndon-----	75	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Borup-----	10	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Augsburg-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Ulen-----	5	Somewhat limited Depth to saturated zone	0.44	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.44
Wheatville-----	3	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Shrink-swell	1.00 1.00	Very limited Depth to saturated zone	1.00
Flaming-----	2	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
I24A: Grimstad-----	70	Somewhat limited Depth to saturated zone	0.99	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	0.99
Strathcona-----	12	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Foldahl-----	5	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
Hamerly-----	5	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Foxhome-----	2	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I24A:							
Karlsruhe-----	2	Somewhat limited Depth to saturated zone	0.44	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.44
Mavie-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Ulen-----	2	Somewhat limited Depth to saturated zone	0.44	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.44
I25A:							
Hamar-----	75	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Garborg-----	10	Somewhat limited Depth to saturated zone	0.99	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	0.99
Rosewood-----	7	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Venlo-----	3	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Flaming-----	2	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
Hangaard-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Kratka-----	1	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
I26A:							
Hamerly-----	75	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Vallers-----	12	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>I26A:</b>							
Foxhome-----	3	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
Grimstad-----	3	Somewhat limited Depth to saturated zone	0.99	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	0.99
Hamerly, very cobbly	3	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Strathcona-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Roliss, depressional	1	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
<b>I27A:</b>							
Hamre-----	80	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Northwood-----	5	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Roliss-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Smiley-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Cathro-----	3	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Kratka-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
<b>I28A:</b>							
Hangaard-----	75	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I28A:							
Hamar-----	7	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Syrene-----	7	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Karlsruhe-----	3	Somewhat limited Depth to saturated zone	0.44	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.44
Rosewood-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Strandquist-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Deerwood-----	2	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
I29A:							
Hattie-----	75	Very limited Shrink-swell Depth to saturated zone	1.00 0.20	Very limited Depth to saturated zone Shrink-swell	1.00 1.00	Very limited Shrink-swell Depth to saturated zone	1.00 0.20
Clearwater-----	12	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00
Reis-----	6	Very limited Depth to saturated zone Shrink-swell	1.00 1.00	Very limited Depth to saturated zone Shrink-swell	1.00 1.00	Very limited Depth to saturated zone Shrink-swell	1.00 1.00
Hattie, very cobbly	5	Very limited Shrink-swell Depth to saturated zone	1.00 0.20	Very limited Depth to saturated zone Shrink-swell	1.00 1.00	Very limited Shrink-swell Depth to saturated zone	1.00 0.20
Hilaire-----	2	Somewhat limited Depth to saturated zone	0.01	Very limited Shrink-swell Depth to saturated zone	1.00 1.00	Somewhat limited Depth to saturated zone	0.01

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>I29D:</b>							
Hattie-----	85	Very limited Shrink-swell Slope Depth to saturated zone	1.00 0.63 0.20	Very limited Depth to saturated zone Shrink-swell Slope	1.00 1.00 1.00 0.63	Very limited Shrink-swell Slope Depth to saturated zone	1.00 1.00 0.20
Clearwater-----	6	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00
Hattie, level-----	5	Very limited Shrink-swell Depth to saturated zone	1.00 0.20	Very limited Depth to saturated zone Shrink-swell	1.00 1.00	Very limited Shrink-swell Depth to saturated zone	1.00 0.20
Boyerlake-----	4	Very limited Shrink-swell Depth to saturated zone	1.00 0.20	Very limited Depth to saturated zone Shrink-swell	1.00 1.00	Very limited Shrink-swell Depth to saturated zone Slope	1.00 0.20 0.12
<b>I30A:</b>							
Hedman-----	85	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Fram-----	5	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
Strathcona-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Haug-----	3	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Strandquist-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
<b>I31A:</b>							
Hedman-----	50	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Fram-----	40	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I31A:							
Strathcona-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Haug-----	3	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Strandquist-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
I32A:							
Hilaire-----	75	Somewhat limited Depth to saturated zone	0.01	Very limited Shrink-swell Depth to saturated zone	1.00 1.00	Somewhat limited Depth to saturated zone	0.01
Espelie-----	12	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00
Huot-----	5	Somewhat limited Depth to saturated zone	0.01	Very limited Shrink-swell Depth to saturated zone	1.00 1.00	Somewhat limited Depth to saturated zone	0.01
Flaming-----	2	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
Foxlake-----	2	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00
Wheatville-----	2	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Shrink-swell	1.00 1.00	Very limited Depth to saturated zone	1.00
Thiefriver-----	1	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Wyandotte-----	1	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I33A: Hilaire-----	75	Somewhat limited Depth to saturated zone	0.01	Very limited Shrink-swell Depth to saturated zone	1.00 1.00	Somewhat limited Depth to saturated zone	0.01
Espelie-----	12	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00
Huot-----	5	Somewhat limited Depth to saturated zone	0.01	Very limited Shrink-swell Depth to saturated zone	1.00 1.00	Somewhat limited Depth to saturated zone	0.01
Flaming-----	2	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
Foxlake-----	2	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00
Wheatville-----	2	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Shrink-swell	1.00 1.00	Very limited Depth to saturated zone	1.00
Thiefriever-----	1	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Wyandotte-----	1	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
I34A: Huot-----	75	Somewhat limited Depth to saturated zone	0.01	Very limited Shrink-swell Depth to saturated zone	1.00 1.00	Somewhat limited Depth to saturated zone	0.01
Thiefriever-----	12	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I34A:							
Hilaire-----	5	Somewhat limited Depth to saturated zone	0.01	Very limited Shrink-swell Depth to saturated zone	1.00 1.00	Somewhat limited Depth to saturated zone	0.01
Flaming-----	3	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
Foxlake-----	3	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00
Ulen-----	2	Somewhat limited Depth to saturated zone	0.44	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.44
I35A:							
Karlsruhe-----	70	Somewhat limited Depth to saturated zone	0.44	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.44
Syrene-----	10	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Ulen-----	10	Somewhat limited Depth to saturated zone	0.44	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.44
Radium-----	5	Not limited		Somewhat limited Depth to saturated zone	0.96	Not limited	
Rosewood-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Sandberg-----	2	Not limited		Not limited		Not limited	
I36A:							
Kittson-----	70	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
Roliss-----	12	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Hamerly-----	5	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>I36A:</b>							
Kratka-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Grimstad-----	3	Somewhat limited Depth to saturated zone	0.99	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	0.99
Strandquist-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Foxhome-----	2	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
<b>I37A:</b>							
Kratka, depressional	45	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Strathcona, depressional-----	45	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Northwood-----	5	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Kratka-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Strathcona-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Roliss-----	1	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
<b>I38A:</b>							
Kratka-----	70	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I38A:							
Smiley-----	7	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Foldahl-----	5	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
Kratka, very cobbly	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Strathcona-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Kratka, depressional	3	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Strandquist-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Linveltd-----	2	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
I39A:							
Linveltd-----	65	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
Kratka-----	14	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Reiner-----	10	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
Smiley-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Eckvoll-----	3	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>I39A:</b>							
Foldahl-----	2	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
Pelan-----	1	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
<b>I40B:</b>							
Maddock-----	85	Not limited		Not limited		Not limited	
Flaming-----	5	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
Sandberg-----	5	Not limited		Not limited		Not limited	
Halverson-----	3	Not limited		Not limited		Not limited	
Hamar-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
<b>I40F:</b>							
Maddock-----	90	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Flaming-----	5	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
Sandberg-----	5	Not limited		Not limited		Not limited	
<b>I41A:</b>							
Markey-----	80	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00
Deerwood-----	12	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Berner-----	2	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00
Hamar-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I41A: Seelyeville-----	2	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00
Syrene-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00 1.00
I42A: Markey, ponded-----	85	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00
Markey-----	5	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00
Deerwood-----	4	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Seelyeville, ponded	4	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00
Hamar-----	1	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Hangaard-----	1	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
I43A: Mavie-----	70	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>I43A:</b>							
Vallers-----	10	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Strandquist-----	7	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Strathcona-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Strathcona, depressional-----	3	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Foxhome-----	2	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
Karlsruhe-----	2	Somewhat limited Depth to saturated zone	0.44	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.44
Grimstad-----	1	Somewhat limited Depth to saturated zone	0.99	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	0.99
<b>I44A:</b>							
Newfolden-----	75	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
Smiley-----	12	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Boash-----	8	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00
Linveltd-----	4	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
Hapludolls-----	1	Very limited Flooding Slope	1.00 0.63	Very limited Flooding Slope	1.00 0.63	Very limited Flooding Slope	1.00 1.00

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I45A:							
Northwood-----	75	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Hamre-----	10	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Berner-----	5	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00
Kratka-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Strandquist-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Roliss-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
I46A:							
Pits-----	85	Not rated		Not rated		Not rated	
Udipsamments-----	10	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Radium-----	2	Not limited		Somewhat limited Depth to saturated zone	0.96	Not limited	
Maddock-----	1	Not limited		Not limited		Not limited	
Marquette-----	1	Not limited		Not limited		Somewhat limited Slope	0.12
Sandberg-----	1	Not limited		Not limited		Not limited	
I47A:							
Poppleton-----	75	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
Flaming-----	12	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I47A:							
Garborg-----	5	Somewhat limited Depth to saturated zone	0.99	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	0.99
Hamar-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Radium-----	2	Not limited		Somewhat limited Depth to saturated zone	0.96	Not limited	
Ulen-----	2	Somewhat limited Depth to saturated zone	0.44	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.44
Maddock-----	1	Not limited		Not limited		Not limited	
I48A:							
Radium-----	75	Not limited		Somewhat limited Depth to saturated zone	0.96	Not limited	
Sandberg-----	7	Not limited		Not limited		Not limited	
Oylen-----	5	Not limited		Somewhat limited Depth to saturated zone	0.96	Not limited	
Flaming-----	4	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
Garborg-----	3	Somewhat limited Depth to saturated zone	0.99	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	0.99
Hangaard-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Hamar-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Poppleton-----	1	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
I49A:							
Rauville-----	80	Very limited Ponding Flooding Depth to saturated zone Shrink-swell	1.00 1.00 1.00 0.50	Very limited Ponding Flooding Depth to saturated zone Shrink-swell	1.00 1.00 1.00 0.50	Very limited Ponding Flooding Depth to saturated zone Shrink-swell	1.00 1.00 1.00 0.50

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I49A: Fluvaquents-----	12	Very limited Ponding Flooding Depth to saturated zone	1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone	1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone	1.00 1.00 1.00
Water-----	5	Not rated		Not rated		Not rated	
Lamoure-----	3	Very limited Flooding Depth to saturated zone Ponding Shrink-swell	1.00 1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Ponding Shrink-swell	1.00 1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Ponding Shrink-swell	1.00 1.00 1.00 0.50
I50A: Reiner-----	70	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
Smiley-----	12	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Reiner, very cobbly	7	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
Linveltd-----	5	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
Eckvoll-----	3	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
Kratka-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
I51A: Reiner-----	65	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
Smiley-----	9	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Reiner fine sandy loam-----	8	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I51A: Linveldt-----	7	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
Kratka-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Eckvoll-----	3	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
Reiner, very cobbly	3	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
I52A: Reis-----	55	Very limited Depth to saturated zone Shrink-swell	1.00 1.00	Very limited Depth to saturated zone Shrink-swell	1.00 1.00	Very limited Depth to saturated zone Shrink-swell	1.00 1.00
Clearwater-----	30	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00
Clearwater, very cobbly-----	5	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00
Clearwater, depressional-----	3	Very limited Ponding Depth to saturated zone Shrink-swell	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Shrink-swell	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Shrink-swell	1.00 1.00 1.00
Espelie-----	3	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00
Hattie-----	3	Very limited Shrink-swell Depth to saturated zone	1.00 0.20	Very limited Depth to saturated zone Shrink-swell	1.00 1.00	Very limited Shrink-swell Depth to saturated zone	1.00 0.20
Wyandotte-----	1	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I53A:							
Roliss-----	75	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Kratka-----	8	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Roliss, very cobbly	7	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Kittson-----	5	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
Roliss, depressional	3	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Smiley-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
I54A:							
Roliss, depressional	80	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Roliss-----	12	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Hamre-----	5	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Kratka-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
I55A:							
Rosewood-----	75	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>I55A:</b>							
Ulen-----	10	Somewhat limited Depth to saturated zone	0.44	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.44
Hamar-----	6	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Rosewood, depressional-----	3	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Syrene-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Karlsruhe-----	1	Somewhat limited Depth to saturated zone	0.44	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.44
Strathcona-----	1	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Thiefriever-----	1	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
<b>I56A:</b>							
Rosewood-----	50	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Venlo-----	40	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Deerwood-----	3	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Syrene-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I56A:							
Ulen-----	2	Somewhat limited Depth to saturated zone	0.44	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.44
Strathcona-----	1	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Thiefriever-----	1	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
I57B:							
Sandberg-----	50	Not limited		Not limited		Not limited	
Radium-----	25	Not limited		Somewhat limited Depth to saturated zone	0.96	Not limited	
Sioux-----	8	Not limited		Not limited		Not limited	
Oylen-----	7	Not limited		Somewhat limited Depth to saturated zone	0.96	Not limited	
Flaming-----	5	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
Garborg-----	5	Somewhat limited Depth to saturated zone	0.99	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	0.99
I58A:							
Seelyeville-----	90	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00
Cathro-----	3	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Dora-----	3	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Shrink-swell	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I58A: Markey-----	3	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00
Berner-----	1	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone Content of organic matter	1.00 1.00 1.00
I59A: Smiley-----	65	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Smiley, very cobbly	10	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Kratka-----	9	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Roliss-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Reiner-----	4	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
Linveltd-----	3	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
Smiley, depressional	3	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Strandquist-----	1	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
I60A: Smiley, depressional	80	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I60A: Smiley-----	10	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Hamre-----	5	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Kratka-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
I61A: Strandquist-----	70	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Mavie-----	8	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Roliss-----	7	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Kratka-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Foxhome-----	4	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
Hangaard-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Northwood-----	3	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
I62A: Syrene-----	70	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>I62A:</b>							
Rosewood-----	11	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Hangaard-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Karlsruhe-----	4	Somewhat limited Depth to saturated zone	0.44	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.44
Deerwood-----	3	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Hamar-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Strandquist-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Radium-----	1	Not limited		Somewhat limited Depth to saturated zone	0.96	Not limited	
Wyandotte-----	1	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00 1.00
<b>I63A:</b>							
Thiefriever-----	70	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00 1.00
Espelie-----	10	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00
Foxlake-----	7	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I63A: Huot-----	5	Somewhat limited Depth to saturated zone	0.01	Very limited Shrink-swell Depth to saturated zone	1.00 1.00	Somewhat limited Depth to saturated zone	0.01
Clearwater, depressional-----	3	Very limited Ponding Depth to saturated zone Shrink-swell	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Shrink-swell	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Shrink-swell	1.00 1.00 1.00
Rosewood-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Ulen-----	1	Somewhat limited Depth to saturated zone	0.44	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.44
Wyandotte-----	1	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
I64A: Ulen-----	70	Somewhat limited Depth to saturated zone	0.44	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.44
Rosewood-----	10	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Flaming-----	8	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
Karlsruhe-----	5	Somewhat limited Depth to saturated zone	0.44	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.44
Radium-----	3	Not limited		Somewhat limited Depth to saturated zone	0.96	Not limited	
Strathcona-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Thiefriever-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>I65A:</b>							
Ulen-----	70	Somewhat limited Depth to saturated zone	0.44	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.44
Rosewood-----	10	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Flaming-----	6	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
Poppleton-----	4	Somewhat limited Depth to saturated zone	0.01	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.01
Karlsruhe-----	3	Somewhat limited Depth to saturated zone	0.44	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.44
Radium-----	3	Not limited		Somewhat limited Depth to saturated zone	0.96	Not limited	
Strathcona-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Thiefriever-----	2	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00 1.00
<b>I66A:</b>							
Vallars-----	75	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Vallars, very cobbly	7	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Hamerly-----	6	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Grimstad-----	3	Somewhat limited Depth to saturated zone	0.99	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	0.99

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I66A:							
Mavie-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Roliss, depressional	3	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Strathcona-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
I67A:							
Wheatville-----	70	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Shrink-swell	1.00 1.00	Very limited Depth to saturated zone	1.00
Augsburg-----	13	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Glyndon-----	8	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Foxlake-----	5	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00
Hilaire-----	2	Somewhat limited Depth to saturated zone	0.01	Very limited Shrink-swell Depth to saturated zone	1.00 1.00	Somewhat limited Depth to saturated zone	0.01
Ulen-----	2	Somewhat limited Depth to saturated zone	0.44	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.44
I68A:							
Wheatville-----	70	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Shrink-swell	1.00 1.00	Very limited Depth to saturated zone	1.00
Augsburg-----	13	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>I68A:</b>							
Glyndon-----	8	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Foxlake-----	5	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00
Hilaire-----	2	Somewhat limited Depth to saturated zone	0.01	Very limited Shrink-swell Depth to saturated zone	1.00 1.00	Somewhat limited Depth to saturated zone	0.01
Ulen-----	2	Somewhat limited Depth to saturated zone	0.44	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.44
<b>I69A:</b>							
Wyandotte-----	65	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Foxlake-----	10	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00
Espelie-----	8	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00
Clearwater, depression-----	5	Very limited Ponding Depth to saturated zone Shrink-swell	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Shrink-swell	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Shrink-swell	1.00 1.00 1.00
Thiefriever-----	5	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Karlsruhe-----	4	Somewhat limited Depth to saturated zone	0.44	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.44
Syrene-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I70A:							
Strathcona-----	70	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Kratka-----	10	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Roliss-----	6	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Grimstad-----	5	Somewhat limited Depth to saturated zone	0.99	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	0.99
Mavie-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Rosewood-----	3	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Strathcona, depressional-----	3	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
M-W:							
Miscellaneous water	100	Not rated		Not rated		Not rated	
W:							
Water-----	100	Not rated		Not rated		Not rated	

Table 19b.--Building Site Development

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>B109A:</b>							
Bowstring-----	45	Very limited Ponding Depth to saturated zone Frost action Flooding	1.00 1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone Cutbanks cave Content of organic matter	1.00 1.00 1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone	1.00 1.00 1.00 1.00
Fluvaquents-----	40	Very limited Ponding Depth to saturated zone Frost action Flooding	1.00 1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone Cutbanks cave	1.00 1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone	1.00 1.00 1.00
Hapludalfs-----	5	Very limited Frost action Slope Low strength Shrink-swell Flooding	1.00 1.00 1.00 0.50 0.40	Very limited Slope Depth to saturated zone Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Slope	1.00
Seelyeville-----	5	Very limited Ponding Depth to saturated zone Frost action Flooding	1.00 1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone Content of organic matter Cutbanks cave	1.00 1.00 1.00 1.00 0.10	Very limited Ponding Flooding Depth to saturated zone	1.00 1.00 1.00
Water-----	5	Not rated		Not rated		Not rated	
<b>B200A:</b>							
Garnes-----	70	Very limited Frost action Low strength	1.00 0.78	Very limited Depth to saturated zone Cutbanks cave	1.00 0.10	Not limited	
Chilgren-----	13	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Ponding Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Depth to saturated zone Ponding	1.00 1.00
Eckvoll-----	5	Somewhat limited Frost action	0.50	Very limited Cutbanks cave Depth to saturated zone	1.00 1.00	Not limited	

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>B200A:</b>							
Garnes, very stony--	5	Very limited Frost action Low strength	1.00 0.78	Very limited Depth to saturated zone Cutbanks cave	1.00 0.10	Somewhat limited Content of large stones	0.01
Grygla-----	4	Very limited Depth to saturated zone Frost action Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Pelan-----	3	Somewhat limited Low strength Frost action	0.78 0.50	Very limited Cutbanks cave Depth to saturated zone	1.00 1.00	Not limited	
<b>B201A:</b>							
Chilgren-----	75	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Ponding Cutbanks cave	1.00 1.00 0.10	Very limited Depth to saturated zone Ponding	1.00 1.00
Garnes-----	9	Very limited Frost action Low strength	1.00 0.78	Very limited Depth to saturated zone Cutbanks cave	1.00 0.10	Not limited	
Grygla-----	5	Very limited Depth to saturated zone Frost action Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Grygla, depressional	5	Very limited Ponding Depth to saturated zone Frost action	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Cutbanks cave	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Hamre-----	5	Very limited Ponding Depth to saturated zone Frost action Low strength	1.00 1.00 1.00 0.78	Very limited Ponding Depth to saturated zone Cutbanks cave	1.00 1.00 0.10	Very limited Ponding Content of organic matter Depth to saturated zone	1.00 1.00 1.00
Pelan-----	1	Somewhat limited Low strength Frost action	0.78 0.50	Very limited Cutbanks cave Depth to saturated zone	1.00 1.00	Not limited	

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>E202A:</b>							
Cathro-----	80	Very limited Ponding Depth to saturated zone Frost action Low strength	 1.00 1.00 1.00 0.78	Very limited Ponding Depth to saturated zone Content of organic matter Cutbanks cave	 1.00 1.00 1.00 0.10	Very limited Ponding Content of organic matter Depth to saturated zone	 1.00 1.00 1.00
Hamre-----	8	Very limited Ponding Depth to saturated zone Frost action Low strength	 1.00 1.00 1.00 0.78	Very limited Ponding Depth to saturated zone Cutbanks cave	 1.00 1.00 0.10	Very limited Ponding Content of organic matter Depth to saturated zone	 1.00 1.00 1.00
Chilgren-----	3	Very limited Depth to saturated zone Frost action Ponding Low strength	 1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Ponding Cutbanks cave	 1.00 1.00 0.10	Very limited Depth to saturated zone Ponding	 1.00 1.00
Northwood-----	3	Very limited Ponding Depth to saturated zone Frost action Low strength	 1.00 1.00 1.00 0.78	Very limited Ponding Depth to saturated zone Cutbanks cave	 1.00 1.00 1.00	Very limited Ponding Depth to saturated zone	 1.00 1.00
Berner-----	2	Very limited Ponding Depth to saturated zone Frost action	 1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Cutbanks cave Content of organic matter	 1.00 1.00 1.00 1.00	Very limited Ponding Content of organic matter Depth to saturated zone	 1.00 1.00 1.00
Grygla-----	2	Very limited Depth to saturated zone Frost action Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	 1.00 1.00
Seelyville-----	2	Very limited Ponding Depth to saturated zone Frost action	 1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Content of organic matter Cutbanks cave	 1.00 1.00 1.00 0.10	Very limited Ponding Depth to saturated zone	 1.00 1.00
<b>E203A:</b>							
Northwood-----	75	Very limited Ponding Depth to saturated zone Frost action Low strength	 1.00 1.00 1.00 0.78	Very limited Ponding Depth to saturated zone Cutbanks cave	 1.00 1.00 1.00	Very limited Ponding Depth to saturated zone	 1.00 1.00

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>E203A:</b>							
Hamre-----	10	Very limited Ponding Depth to saturated zone Frost action Low strength	1.00 1.00 1.00 0.78	Very limited Ponding Depth to saturated zone Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Ponding Content of organic matter Depth to saturated zone	1.00 1.00 1.00 1.00
Grygla-----	7	Very limited Depth to saturated zone Frost action Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00 1.00
Berner-----	5	Very limited Ponding Depth to saturated zone Frost action	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Cutbanks cave Content of organic matter	1.00 1.00 1.00 1.00	Very limited Ponding Content of organic matter Depth to saturated zone	1.00 1.00 1.00 1.00
Chilgren-----	3	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Ponding Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Depth to saturated zone Ponding	1.00 1.00
<b>E204A:</b>							
Roliss-----	75	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Ponding Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Depth to saturated zone Ponding	1.00 1.00
Grygla-----	8	Very limited Depth to saturated zone Frost action Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Chilgren-----	5	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Ponding Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Depth to saturated zone Ponding	1.00 1.00
Garnes-----	5	Very limited Frost action Low strength	1.00 0.78	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00 0.10	Not limited	

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>E204A:</b>							
Roliss, depressional	5	Very limited Ponding Depth to saturated zone Frost action Low strength	1.00 1.00 1.00 0.78	Very limited Ponding Depth to saturated zone Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Ponding Depth to saturated zone	1.00 1.00 1.00
Hamre-----	2	Very limited Ponding Depth to saturated zone Frost action Low strength	1.00 1.00 1.00 0.78	Very limited Ponding Depth to saturated zone Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Ponding Content of organic matter Depth to saturated zone	1.00 1.00 1.00
<b>E205A:</b>							
Berner-----	80	Very limited Ponding Depth to saturated zone Frost action	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Cutbanks cave Content of organic matter	1.00 1.00 1.00 1.00	Very limited Ponding Content of organic matter Depth to saturated zone	1.00 1.00 1.00
Northwood-----	7	Very limited Ponding Depth to saturated zone Frost action Low strength	1.00 1.00 1.00 0.78	Very limited Ponding Depth to saturated zone Cutbanks cave	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Grygla-----	5	Very limited Depth to saturated zone Frost action Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Cathro-----	3	Very limited Ponding Depth to saturated zone Frost action Low strength	1.00 1.00 1.00 0.78	Very limited Ponding Depth to saturated zone Content of organic matter Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Ponding Content of organic matter Depth to saturated zone	1.00 1.00 1.00
Hamre-----	3	Very limited Ponding Depth to saturated zone Frost action Low strength	1.00 1.00 1.00 0.78	Very limited Ponding Depth to saturated zone Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Ponding Content of organic matter Depth to saturated zone	1.00 1.00 1.00
Seelyeville-----	2	Very limited Ponding Depth to saturated zone Frost action	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Content of organic matter Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Ponding Depth to saturated zone	1.00 1.00

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>E206A:</b>							
Hamre-----	80	Very limited Ponding Depth to saturated zone Frost action Low strength	1.00 1.00 1.00 0.78	Very limited Ponding Depth to saturated zone Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Ponding Content of organic matter Depth to saturated zone	1.00 1.00 1.00 1.00
Chilgren-----	8	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Ponding Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Depth to saturated zone Ponding	1.00 1.00 1.00
Northwood-----	5	Very limited Ponding Depth to saturated zone Frost action Low strength	1.00 1.00 1.00 1.00 0.78	Very limited Ponding Depth to saturated zone Cutbanks cave	1.00 1.00 1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00 1.00
Cathro-----	3	Very limited Ponding Depth to saturated zone Frost action Low strength	1.00 1.00 1.00 1.00 0.78	Very limited Ponding Depth to saturated zone Content of organic matter Cutbanks cave	1.00 1.00 1.00 1.00 0.10	Very limited Ponding Content of organic matter Depth to saturated zone	1.00 1.00 1.00 1.00
Grygla-----	2	Very limited Depth to saturated zone Frost action Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00 1.00
Roliss-----	2	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Ponding Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Depth to saturated zone Ponding	1.00 1.00 1.00
<b>I1A:</b>							
Augsburg-----	75	Very limited Depth to saturated zone Frost action Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding Too clayey	1.00 1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Ponding	1.00 1.00 1.00
Borup-----	10	Very limited Depth to saturated zone Frost action Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Depth to saturated zone Ponding	1.00 1.00 1.00

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>I1A:</b>							
Foxlake-----	5	Very limited Depth to saturated zone Frost action Low strength Shrink-swell Ponding	1.00 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Too clayey Cutbanks cave	1.00 1.00 1.00 0.50 0.10	Very limited Depth to saturated zone Ponding	1.00 1.00
Augsburg, depressional-----	3	Very limited Ponding Depth to saturated zone Frost action	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Too clayey Cutbanks cave	1.00 1.00 0.50 0.10	Very limited Ponding Depth to saturated zone	1.00 1.00
Wheatville-----	3	Very limited Frost action Depth to saturated zone	1.00 0.90	Very limited Depth to saturated zone Too clayey Cutbanks cave	1.00 0.50 0.10	Somewhat limited Depth to saturated zone	0.90
Glyndon-----	2	Very limited Depth to saturated zone Frost action	1.00 1.00	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Very limited Depth to saturated zone	1.00
Espelie-----	1	Very limited Depth to saturated zone Frost action Low strength Shrink-swell Ponding	1.00 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding Too clayey	1.00 1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Ponding	1.00 1.00
Hattie-----	1	Very limited Low strength Shrink-swell Frost action Depth to saturated zone	1.00 1.00 0.50 0.10	Very limited Depth to saturated zone Cutbanks cave Too clayey	1.00 1.00 1.00 0.50	Very limited Too clayey Depth to saturated zone	1.00 0.10
<b>I2A:</b>							
Augsburg-----	75	Very limited Depth to saturated zone Frost action Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding Too clayey	1.00 1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Ponding	1.00 1.00
Borup-----	10	Very limited Depth to saturated zone Frost action Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I2A: Foxlake-----	5	Very limited Depth to saturated zone Frost action Low strength Shrink-swell Ponding	1.00 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Too clayey Cutbanks cave	1.00 1.00 1.00 0.50 0.10	Very limited Depth to saturated zone Ponding	1.00 1.00
Augsburg, depressional-----	3	Very limited Ponding Depth to saturated zone Frost action	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Too clayey Cutbanks cave	1.00 1.00 0.50 0.10	Very limited Ponding Depth to saturated zone	1.00 1.00
Wheatville-----	3	Very limited Frost action Depth to saturated zone	1.00 0.90	Very limited Depth to saturated zone Too clayey Cutbanks cave	1.00 0.50 0.10	Somewhat limited Depth to saturated zone	0.90
Glyndon-----	2	Very limited Depth to saturated zone Frost action	1.00 1.00	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Very limited Depth to saturated zone	1.00
Espelie-----	1	Very limited Depth to saturated zone Frost action Low strength Shrink-swell Ponding	1.00 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding Too clayey	1.00 1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Ponding	1.00 1.00
Hattie-----	1	Very limited Low strength Shrink-swell Frost action Depth to saturated zone	1.00 1.00 0.50 0.10	Very limited Depth to saturated zone Cutbanks cave Too clayey	1.00 1.00 1.00 0.50	Very limited Too clayey Depth to saturated zone	1.00 0.10
I3A: Bernier-----	80	Very limited Ponding Depth to saturated zone Frost action	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Cutbanks cave Content of organic matter	1.00 1.00 1.00 1.00	Very limited Ponding Content of organic matter Depth to saturated zone	1.00 1.00 1.00
Northwood-----	7	Very limited Ponding Depth to saturated zone Frost action Low strength	1.00 1.00 1.00 0.78	Very limited Ponding Depth to saturated zone Cutbanks cave	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>I3A:</b>							
Kratka-----	5	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00 1.00
Hamre-----	3	Very limited Ponding Depth to saturated zone Frost action Low strength	1.00 1.00 1.00 0.78	Very limited Ponding Depth to saturated zone Cutbanks cave	1.00 1.00 0.10	Very limited Ponding Content of organic matter Depth to saturated zone	1.00 1.00 1.00
Strathcona-----	3	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Seelyeville-----	2	Very limited Ponding Depth to saturated zone Frost action	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Content of organic matter Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Ponding Depth to saturated zone	1.00 1.00
<b>I4A:</b>							
Berner-----	30	Very limited Ponding Depth to saturated zone Frost action	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Cutbanks cave Content of organic matter	1.00 1.00 1.00 1.00	Very limited Ponding Content of organic matter Depth to saturated zone	1.00 1.00 1.00
Rosewood, depressional-----	30	Very limited Ponding Depth to saturated zone Frost action	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Cutbanks cave	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Strathcona, depressional-----	30	Very limited Ponding Depth to saturated zone Frost action Low strength	1.00 1.00 1.00 0.78	Very limited Ponding Depth to saturated zone Cutbanks cave	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Rosewood-----	4	Very limited Depth to saturated zone Ponding Frost action	1.00 1.00 0.50	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>I4A:</b>							
Deerwood-----	2	Very limited Ponding Depth to saturated zone Frost action	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Cutbanks cave	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Mavie-----	2	Very limited Depth to saturated zone Frost action Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Droughty	1.00 1.00 0.01
Strathcona-----	2	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
<b>I5A:</b>							
Borup-----	75	Very limited Depth to saturated zone Frost action Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Cutbanks cave	1.00 1.00 0.10	Very limited Depth to saturated zone Ponding	1.00 1.00
Glyndon-----	9	Very limited Depth to saturated zone Frost action	1.00 1.00	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Very limited Depth to saturated zone	1.00
Rosewood-----	8	Very limited Depth to saturated zone Ponding Frost action	1.00 1.00 0.50	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Augsburg-----	5	Very limited Depth to saturated zone Frost action Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding Too clayey	1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Ponding	1.00 1.00
Augsburg, depressional-----	3	Very limited Ponding Depth to saturated zone Frost action	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Too clayey Cutbanks cave	1.00 1.00 0.50 0.10	Very limited Ponding Depth to saturated zone	1.00 1.00
<b>I6A:</b>							
Borup-----	75	Very limited Depth to saturated zone Frost action Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Cutbanks cave	1.00 1.00 0.10	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>I6A:</b>							
Glyndon-----	9	Very limited Depth to saturated zone Frost action	1.00 1.00	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Very limited Depth to saturated zone	1.00
Rosewood-----	8	Very limited Depth to saturated zone Ponding Frost action	1.00 1.00 0.50	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Augsburg-----	5	Very limited Depth to saturated zone Frost action Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding Too clayey	1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Ponding	1.00 1.00
Augsburg, depressional-----	3	Very limited Ponding Depth to saturated zone Frost action	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Too clayey Cutbanks cave	1.00 1.00 0.50 0.10	Very limited Ponding Depth to saturated zone	1.00 1.00
<b>I7A:</b>							
Bowstring-----	45	Very limited Ponding Depth to saturated zone Frost action Flooding	1.00 1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone Cutbanks cave Content of organic matter	1.00 1.00 1.00 1.00 1.00	Very limited Ponding Flooding Content of organic matter Depth to saturated zone	1.00 1.00 1.00 1.00
Fluvaquents-----	45	Very limited Ponding Depth to saturated zone Frost action Flooding	1.00 1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone Cutbanks cave	1.00 1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone	1.00 1.00 1.00
Hapludolls-----	5	Somewhat limited Slope Frost action Flooding	0.63 0.50 0.40	Somewhat limited Slope Cutbanks cave	0.63 0.10	Somewhat limited Slope	0.63
Water-----	5	Not rated		Not rated		Not rated	
<b>I8A:</b>							
Cathro-----	80	Very limited Ponding Depth to saturated zone Frost action Low strength	1.00 1.00 1.00 0.78	Very limited Ponding Depth to saturated zone Content of organic matter Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Ponding Content of organic matter Depth to saturated zone	1.00 1.00 1.00

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>I8A:</b>							
Hamre-----	8	Very limited Ponding Depth to saturated zone Frost action Low strength	1.00 1.00 1.00 0.78	Very limited Ponding Depth to saturated zone Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Ponding Content of organic matter Depth to saturated zone	1.00 1.00 1.00 1.00
Northwood-----	3	Very limited Ponding Depth to saturated zone Frost action Low strength	1.00 1.00 1.00 0.78	Very limited Ponding Depth to saturated zone Cutbanks cave	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Roliss-----	3	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Ponding Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Depth to saturated zone Ponding	1.00 1.00
Berner-----	2	Very limited Ponding Depth to saturated zone Frost action	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Cutbanks cave Content of organic matter	1.00 1.00 1.00 1.00	Very limited Ponding Content of organic matter Depth to saturated zone	1.00 1.00 1.00
Kratka-----	2	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Seelyeville-----	2	Very limited Ponding Depth to saturated zone Frost action	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Content of organic matter Cutbanks cave	1.00 1.00 1.00 1.00 0.10	Very limited Ponding Depth to saturated zone	1.00 1.00
<b>I9A:</b>							
Clearwater-----	80	Very limited Depth to saturated zone Frost action Low strength Shrink-swell Ponding	1.00 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding Too clayey	1.00 1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Too clayey Ponding	1.00 1.00 1.00

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I9A: Clearwater, very cobbly-----	5	Very limited Depth to saturated zone Frost action Low strength Shrink-swell Ponding	1.00 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding Too clayey	1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Too clayey Ponding	1.00 1.00 1.00
Reis-----	5	Very limited Depth to saturated zone Frost action Low strength Shrink-swell	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Too clayey	1.00 1.00 0.88	Very limited Depth to saturated zone Too clayey	1.00 1.00
Clearwater, depressional-----	3	Very limited Ponding Depth to saturated zone Frost action Low strength Shrink-swell	1.00 1.00 1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Cutbanks cave Too clayey	1.00 1.00 1.00 0.50	Very limited Ponding Depth to saturated zone	1.00 1.00
Espelie-----	3	Very limited Depth to saturated zone Frost action Low strength Shrink-swell Ponding	1.00 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding Too clayey	1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Ponding	1.00 1.00
Foxlake-----	2	Very limited Depth to saturated zone Frost action Low strength Shrink-swell Ponding	1.00 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Too clayey Cutbanks cave	1.00 1.00 0.50 0.10	Very limited Depth to saturated zone Ponding	1.00 1.00
Hattie-----	1	Very limited Low strength Shrink-swell Frost action Depth to saturated zone	1.00 1.00 0.50 0.10	Very limited Depth to saturated zone Cutbanks cave Too clayey	1.00 1.00 1.00 0.50	Very limited Too clayey Depth to saturated zone	1.00 0.10
Huot-----	1	Somewhat limited Frost action	0.50	Very limited Cutbanks cave Depth to saturated zone Too clayey	1.00 1.00 0.50	Not limited	

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I10A: Clearwater, depressional-----	85	Very limited Ponding Depth to saturated zone Frost action Low strength Shrink-swell	1.00 1.00 1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Cutbanks cave Too clayey	1.00 1.00 1.00 0.50	Very limited Ponding Depth to saturated zone	1.00 1.00 1.00
Clearwater-----	9	Very limited Depth to saturated zone Frost action Low strength Shrink-swell Ponding	1.00 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding Too clayey	1.00 1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Too clayey Ponding	1.00 1.00 1.00
Augsburg, depressional-----	3	Very limited Ponding Depth to saturated zone Frost action	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Too clayey Cutbanks cave	1.00 1.00 1.00 0.50 0.10	Very limited Ponding Depth to saturated zone	1.00 1.00
Reis-----	2	Very limited Depth to saturated zone Frost action Low strength Shrink-swell	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Too clayey	1.00 1.00 1.00 0.88	Very limited Depth to saturated zone Too clayey	1.00 1.00
Espelie-----	1	Very limited Depth to saturated zone Frost action Low strength Shrink-swell Ponding	1.00 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding Too clayey	1.00 1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Ponding	1.00 1.00
I11A: Deerwood-----	85	Very limited Ponding Depth to saturated zone Frost action	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Cutbanks cave	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Rosewood-----	6	Very limited Depth to saturated zone Ponding Frost action	1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I11A: Markey-----	3	Very limited Ponding Depth to saturated zone Frost action	 1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Cutbanks cave Content of organic matter	 1.00 1.00 1.00 1.00	Very limited Ponding Content of organic matter Depth to saturated zone	 1.00 1.00 1.00
Strathcona-----	2	Very limited Depth to saturated zone Frost action Ponding Low strength	 1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Cutbanks cave Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	 1.00 1.00
Syrene-----	2	Very limited Depth to saturated zone Ponding Frost action	 1.00 1.00 0.50	Very limited Depth to saturated zone Cutbanks cave Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Droughty	 1.00 1.00 0.30
Venlo-----	2	Very limited Ponding Depth to saturated zone Frost action	 1.00 1.00 0.50	Very limited Ponding Depth to saturated zone Cutbanks cave	 1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Droughty	 1.00 1.00 0.01
I12A: Eckvoll-----	70	Somewhat limited Frost action	 0.50	Very limited Cutbanks cave Depth to saturated zone	 1.00 1.00	Not limited	
Kratka-----	8	Very limited Depth to saturated zone Frost action Ponding Low strength	 1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Cutbanks cave Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	 1.00 1.00
Smiley-----	7	Very limited Depth to saturated zone Frost action Ponding Low strength	 1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Ponding Cutbanks cave	 1.00 1.00 0.10	Very limited Depth to saturated zone Ponding	 1.00 1.00
Linveltd-----	5	Somewhat limited Frost action	 0.50	Very limited Cutbanks cave Depth to saturated zone	 1.00 1.00	Not limited	
Reiner-----	5	Somewhat limited Low strength Frost action	 0.78 0.50	Very limited Depth to saturated zone Cutbanks cave	 1.00 0.10	Not limited	

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I12A:							
Foldahl-----	2	Somewhat limited Frost action	0.50	Very limited Cutbanks cave Depth to saturated zone	1.00 1.00	Not limited	
Pelan-----	2	Somewhat limited Low strength Frost action	0.78 0.50	Very limited Cutbanks cave Depth to saturated zone	1.00 1.00	Not limited	
Poppleton-----	1	Not limited		Very limited Cutbanks cave Depth to saturated zone	1.00 1.00	Somewhat limited Droughty	0.09
I13A:							
Espelie-----	75	Very limited Depth to saturated zone Frost action Low strength Shrink-swell Ponding	1.00 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding Too clayey	1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Ponding	1.00 1.00
Foxlake-----	8	Very limited Depth to saturated zone Frost action Low strength Shrink-swell Ponding	1.00 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Too clayey Cutbanks cave	1.00 1.00 0.50 0.10	Very limited Depth to saturated zone Ponding	1.00 1.00
Hilaire-----	7	Somewhat limited Frost action	0.50	Very limited Cutbanks cave Depth to saturated zone Too clayey	1.00 1.00 0.50	Somewhat limited Droughty	0.01
Clearwater, depressional-----	5	Very limited Ponding Depth to saturated zone Frost action Low strength Shrink-swell	1.00 1.00 1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Cutbanks cave Too clayey	1.00 1.00 1.00 0.50	Very limited Ponding Depth to saturated zone	1.00 1.00
Thiefriver-----	5	Very limited Depth to saturated zone Frost action Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding Too clayey	1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>I14B:</b>							
Fairdale-----	85	Very limited Flooding Shrink-swell Frost action	1.00 0.50 0.50	Very limited Depth to saturated zone Flooding Cutbanks cave	1.00 0.60 0.10	Somewhat limited Flooding	0.60
Fluvaquents-----	6	Very limited Ponding Depth to saturated zone Frost action Flooding	1.00 1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone Cutbanks cave	1.00 1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone	1.00 1.00 1.00
Hapludolls-----	5	Somewhat limited Slope Frost action Flooding	0.63 0.50 0.40	Somewhat limited Slope Cutbanks cave	0.63 0.10	Somewhat limited Slope	0.63
Hapludalfs-----	2	Very limited Frost action Slope Low strength Shrink-swell Flooding	1.00 1.00 1.00 0.50 0.40	Very limited Slope Depth to saturated zone Cutbanks cave	1.00 1.00 0.10	Very limited Slope	1.00
Zell-----	2	Very limited Frost action Slope	1.00 0.84	Somewhat limited Slope Cutbanks cave	0.84 0.10	Somewhat limited Slope	0.84
<b>I14D:</b>							
Fairdale-----	85	Very limited Flooding Shrink-swell Frost action Slope	1.00 0.50 0.50 0.37	Very limited Depth to saturated zone Flooding Slope Cutbanks cave	1.00 0.60 0.37 0.10	Somewhat limited Flooding Slope	0.60 0.37
Fluvaquents-----	6	Very limited Ponding Depth to saturated zone Frost action Flooding	1.00 1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone Cutbanks cave	1.00 1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone	1.00 1.00 1.00
Hapludolls-----	4	Somewhat limited Slope Frost action Flooding	0.63 0.50 0.40	Somewhat limited Slope Cutbanks cave	0.63 0.10	Somewhat limited Slope	0.63
Zell-----	3	Very limited Frost action Slope	1.00 0.84	Somewhat limited Slope Cutbanks cave	0.84 0.10	Somewhat limited Slope	0.84
Hapludalfs-----	2	Very limited Frost action Slope Low strength Shrink-swell Flooding	1.00 1.00 1.00 0.50 0.40	Very limited Slope Depth to saturated zone Cutbanks cave	1.00 1.00 0.10	Very limited Slope	1.00

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I15A: Flaming-----	70	Not limited		Very limited Cutbanks cave Depth to saturated zone	1.00 1.00	Somewhat limited Droughty	0.15
Garborg-----	10	Somewhat limited Depth to saturated zone Frost action	0.78 0.50	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Somewhat limited Depth to saturated zone Droughty	0.78 0.02
Hamar-----	5	Very limited Depth to saturated zone Ponding Frost action	1.00 1.00 0.50	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Droughty	1.00 1.00 0.21
Ulen-----	5	Somewhat limited Frost action Depth to saturated zone	0.50 0.22	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Somewhat limited Depth to saturated zone	0.22
Poppleton-----	3	Not limited		Very limited Cutbanks cave Depth to saturated zone	1.00 1.00	Somewhat limited Droughty	0.09
Sandberg-----	3	Not limited		Very limited Cutbanks cave	1.00	Somewhat limited Droughty Gravel content	0.85 0.01
Foldahl-----	2	Somewhat limited Frost action	0.50	Very limited Cutbanks cave Depth to saturated zone	1.00 1.00	Not limited	
Radium-----	2	Not limited		Very limited Cutbanks cave Depth to saturated zone	1.00 0.96	Somewhat limited Droughty	0.76
I16F: Fluvaquents-----	55	Very limited Ponding Depth to saturated zone Frost action Flooding	1.00 1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone Cutbanks cave	1.00 1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone	1.00 1.00 1.00
Hapludolls-----	25	Somewhat limited Slope Frost action Flooding	0.63 0.50 0.40	Somewhat limited Slope Cutbanks cave	0.63 0.10	Somewhat limited Slope	0.63
Hapludalfs-----	7	Very limited Frost action Slope Low strength Shrink-swell Flooding	1.00 1.00 1.00 0.50 0.40	Very limited Slope Depth to saturated zone Cutbanks cave	1.00 1.00 0.10	Very limited Slope	1.00

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I16F:							
Fairdale-----	5	Very limited Flooding Shrink-swell Frost action Slope	1.00 0.50 0.50 0.37	Very limited Depth to saturated zone Flooding Slope Cutbanks cave	1.00 1.00 0.60 0.37 0.10	Somewhat limited Flooding Slope	0.60 0.37
Water-----	5	Not rated		Not rated		Not rated	
Bowstring-----	2	Very limited Ponding Depth to saturated zone Frost action Flooding	1.00 1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone Cutbanks cave Content of organic matter	1.00 1.00 1.00 1.00 1.00	Very limited Ponding Flooding Content of organic matter Depth to saturated zone	1.00 1.00 1.00 1.00
Rauville-----	1	Very limited Ponding Depth to saturated zone Frost action Flooding Low strength	1.00 1.00 1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone Cutbanks cave	1.00 1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone	1.00 1.00 1.00
I17A:							
Foldahl-----	75	Somewhat limited Frost action	0.50	Very limited Cutbanks cave Depth to saturated zone	1.00 1.00	Not limited	
Kratka-----	10	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Roliss-----	5	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Ponding Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Depth to saturated zone Ponding	1.00 1.00
Flaming-----	4	Not limited		Very limited Cutbanks cave Depth to saturated zone	1.00 1.00	Somewhat limited Droughty	0.15
Grimstad-----	2	Very limited Frost action Depth to saturated zone	1.00 0.78	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Somewhat limited Depth to saturated zone	0.78

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I17A: Linveltdt-----	2	Somewhat limited Frost action	0.50	Very limited Cutbanks cave Depth to saturated zone	1.00 1.00	Not limited	
Eckvoll-----	1	Somewhat limited Frost action	0.50	Very limited Cutbanks cave Depth to saturated zone	1.00 1.00	Not limited	
Strathcona-----	1	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
I18A: Foldahl-----	75	Somewhat limited Frost action	0.50	Very limited Cutbanks cave Depth to saturated zone	1.00 1.00	Not limited	
Kratka-----	10	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Roliss-----	5	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Ponding Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Depth to saturated zone Ponding	1.00 1.00
Flaming-----	4	Not limited		Very limited Cutbanks cave Depth to saturated zone	1.00 1.00	Somewhat limited Droughty	0.15
Grimstad-----	2	Very limited Frost action Depth to saturated zone	1.00 0.78	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Somewhat limited Depth to saturated zone	0.78
Linveltdt-----	2	Somewhat limited Frost action	0.50	Very limited Cutbanks cave Depth to saturated zone	1.00 1.00	Not limited	
Eckvoll-----	1	Somewhat limited Frost action	0.50	Very limited Cutbanks cave Depth to saturated zone	1.00 1.00	Not limited	

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I18A: Strathcona-----	1	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
I19A: Foxhome-----	65	Somewhat limited Low strength Frost action	0.78 0.50	Very limited Cutbanks cave Depth to saturated zone	1.00 1.00	Not limited	
Kittson-----	10	Somewhat limited Low strength Frost action	0.78 0.50	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00 0.10	Not limited	
Strandquist-----	10	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Foldahl-----	5	Somewhat limited Frost action	0.50	Very limited Cutbanks cave Depth to saturated zone	1.00 1.00	Not limited	
Grimstad-----	5	Very limited Frost action Depth to saturated zone	1.00 0.78	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00 1.00	Somewhat limited Depth to saturated zone	0.78
Roliss-----	3	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Ponding Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Depth to saturated zone Ponding	1.00 1.00
Mavie-----	2	Very limited Depth to saturated zone Frost action Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Droughty	1.00 1.00 0.01
I20A: Foxlake-----	75	Very limited Depth to saturated zone Frost action Low strength Shrink-swell Ponding	1.00 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Too clayey Cutbanks cave	1.00 1.00 1.00 0.50 0.10	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I20A: Clearwater-----	5	Very limited Depth to saturated zone Frost action Low strength Shrink-swell Ponding	1.00 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding Too clayey	1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Too clayey Ponding	1.00 1.00 1.00
Foxlake, very cobbly	5	Very limited Depth to saturated zone Frost action Low strength Shrink-swell Ponding	1.00 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Too clayey Cutbanks cave	1.00 1.00 0.50 0.10	Very limited Depth to saturated zone Ponding	1.00 1.00
Augsburg-----	3	Very limited Depth to saturated zone Frost action Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding Too clayey	1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Ponding	1.00 1.00
Clearwater, depressional-----	3	Very limited Ponding Depth to saturated zone Frost action Low strength Shrink-swell	1.00 1.00 1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Cutbanks cave Too clayey	1.00 1.00 1.00 0.50	Very limited Ponding Depth to saturated zone	1.00 1.00
Espelie-----	3	Very limited Depth to saturated zone Frost action Low strength Shrink-swell Ponding	1.00 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding Too clayey	1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Ponding	1.00 1.00
Hilaire-----	2	Somewhat limited Frost action	0.50	Very limited Cutbanks cave Depth to saturated zone Too clayey	1.00 1.00 0.50	Somewhat limited Droughty	0.01
Reis-----	2	Very limited Depth to saturated zone Frost action Low strength Shrink-swell	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Too clayey	1.00 1.00 1.00 0.88	Very limited Depth to saturated zone Too clayey	1.00 1.00
Wheatville-----	2	Very limited Frost action Depth to saturated zone	1.00 0.90	Very limited Depth to saturated zone Too clayey Cutbanks cave	1.00 0.50 0.10	Somewhat limited Depth to saturated zone	0.90

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I21A:							
Fram-----	85	Very limited Frost action	1.00	Very limited Depth to saturated zone Cutbanks cave	1.00 0.10	Not limited	
Hedman-----	12	Very limited Depth to saturated zone Frost action Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Cutbanks cave	1.00 1.00 0.10	Very limited Depth to saturated zone Ponding	1.00 1.00
Strathcona-----	2	Very limited Depth to saturated zone Frost action Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Foxhome-----	1	Somewhat limited Frost action	0.50	Very limited Cutbanks cave Depth to saturated zone	1.00 1.00	Not limited	
I22A:							
Glyndon-----	75	Very limited Depth to saturated zone Frost action	1.00 1.00	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Very limited Depth to saturated zone	1.00
Borup-----	10	Very limited Depth to saturated zone Frost action Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Cutbanks cave	1.00 1.00 0.10	Very limited Depth to saturated zone Ponding	1.00 1.00
Augsburg-----	5	Very limited Depth to saturated zone Frost action Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Too clayey Cutbanks cave	1.00 1.00 0.50 0.10	Very limited Depth to saturated zone Ponding	1.00 1.00
Ulen-----	5	Somewhat limited Frost action Depth to saturated zone	0.50 0.22	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Somewhat limited Depth to saturated zone	0.22
Wheatville-----	3	Very limited Frost action Depth to saturated zone	1.00 0.90	Very limited Depth to saturated zone Too clayey Cutbanks cave	1.00 0.50 0.10	Somewhat limited Depth to saturated zone	0.90
Flaming-----	2	Not limited		Very limited Cutbanks cave Depth to saturated zone	1.00 1.00	Somewhat limited Droughty	0.15

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I23A:							
Glyndon-----	75	Very limited Depth to saturated zone Frost action	1.00 1.00	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Very limited Depth to saturated zone	1.00
Borup-----	10	Very limited Depth to saturated zone Frost action Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Cutbanks cave	1.00 1.00 0.10	Very limited Depth to saturated zone Ponding	1.00 1.00
Augsburg-----	5	Very limited Depth to saturated zone Frost action Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding Too clayey	1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Ponding	1.00 1.00
Ulen-----	5	Somewhat limited Frost action Depth to saturated zone	0.50 0.22	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Somewhat limited Depth to saturated zone	0.22
Wheatville-----	3	Very limited Frost action Depth to saturated zone	1.00 0.90	Very limited Depth to saturated zone Too clayey Cutbanks cave	1.00 0.50 0.10	Somewhat limited Depth to saturated zone	0.90
Flaming-----	2	Not limited		Very limited Cutbanks cave Depth to saturated zone	1.00 1.00	Somewhat limited Droughty	0.15
I24A:							
Grimstad-----	70	Very limited Frost action Depth to saturated zone	1.00 0.78	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Somewhat limited Depth to saturated zone	0.78
Strathcona-----	12	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Foldahl-----	5	Somewhat limited Frost action	0.50	Very limited Cutbanks cave Depth to saturated zone	1.00 1.00	Not limited	
Hamerly-----	5	Very limited Frost action Depth to saturated zone Low strength	1.00 0.90 0.78	Very limited Depth to saturated zone Cutbanks cave	1.00 0.10	Somewhat limited Depth to saturated zone	0.90

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>I24A:</b>							
Foxhome-----	2	Somewhat limited Low strength Frost action	 0.78 0.50	Very limited Cutbanks cave Depth to saturated zone	 1.00 1.00	Not limited	
Karlsruhe-----	2	Somewhat limited Frost action Depth to saturated zone	 0.50 0.22	Very limited Depth to saturated zone Cutbanks cave	 1.00 1.00	Somewhat limited Depth to saturated zone	0.22
Mavie-----	2	Very limited Depth to saturated zone Frost action Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding	 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Droughty	 1.00 1.00 0.01
Ulen-----	2	Somewhat limited Frost action Depth to saturated zone	 0.50 0.22	Very limited Depth to saturated zone Cutbanks cave	 1.00 1.00	Somewhat limited Depth to saturated zone	0.22
<b>I25A:</b>							
Hamar-----	75	Very limited Depth to saturated zone Ponding Frost action	 1.00 1.00 0.50	Very limited Depth to saturated zone Cutbanks cave Ponding	 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Droughty	 1.00 1.00 0.21
Garborg-----	10	Somewhat limited Depth to saturated zone Frost action	 0.78 0.50	Very limited Depth to saturated zone Cutbanks cave	 1.00 1.00	Somewhat limited Depth to saturated zone Droughty	0.78 0.02
Rosewood-----	7	Very limited Depth to saturated zone Ponding Frost action	 1.00 1.00 0.50	Very limited Depth to saturated zone Cutbanks cave Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	 1.00 1.00
Venlo-----	3	Very limited Ponding Depth to saturated zone Frost action	 1.00 1.00 0.50	Very limited Ponding Depth to saturated zone Cutbanks cave	 1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Droughty	 1.00 1.00 0.01
Flaming-----	2	Not limited		Very limited Cutbanks cave Depth to saturated zone	 1.00 1.00	Somewhat limited Droughty	0.15
Hangaard-----	2	Very limited Depth to saturated zone Ponding Frost action	 1.00 1.00 0.50	Very limited Depth to saturated zone Cutbanks cave Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Droughty	 1.00 1.00 0.92

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I25A: Kratka-----	1	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00 1.00
I26A: Hamerly-----	75	Very limited Frost action Depth to saturated zone Low strength	1.00 0.90 0.78	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00 0.10	Somewhat limited Depth to saturated zone	0.90
Vallers-----	12	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Ponding Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Depth to saturated zone Ponding	1.00 1.00
Foxhome-----	3	Somewhat limited Low strength Frost action	0.78 0.50	Very limited Cutbanks cave Depth to saturated zone	1.00 1.00	Not limited	
Grimstad-----	3	Very limited Frost action Depth to saturated zone	1.00 0.78	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00 1.00	Somewhat limited Depth to saturated zone	0.78
Hamerly, very cobbly	3	Very limited Frost action Depth to saturated zone Low strength	1.00 0.90 0.78	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00 0.10	Somewhat limited Depth to saturated zone	0.90
Strathcona-----	3	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Roliss, depressional	1	Very limited Ponding Depth to saturated zone Frost action Low strength	1.00 1.00 1.00 0.78	Very limited Ponding Depth to saturated zone Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Ponding Depth to saturated zone	1.00 1.00
I27A: Hamre-----	80	Very limited Ponding Depth to saturated zone Frost action Low strength	1.00 1.00 1.00 0.78	Very limited Ponding Depth to saturated zone Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Ponding Content of organic matter Depth to saturated zone	1.00 1.00 1.00

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>I27A:</b>							
Northwood-----	5	Very limited Ponding Depth to saturated zone Frost action Low strength	1.00 1.00 1.00 0.78	Very limited Ponding Depth to saturated zone Cutbanks cave	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00 1.00
Roliss-----	5	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Ponding Cutbanks cave	1.00 1.00 0.10	Very limited Depth to saturated zone Ponding	1.00 1.00
Smiley-----	5	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Ponding Cutbanks cave	1.00 1.00 0.10	Very limited Depth to saturated zone Ponding	1.00 1.00
Cathro-----	3	Very limited Ponding Depth to saturated zone Frost action Low strength	1.00 1.00 1.00 0.78	Very limited Ponding Depth to saturated zone Content of organic matter Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Ponding Content of organic matter Depth to saturated zone	1.00 1.00 1.00
Kratka-----	2	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
<b>I28A:</b>							
Hangaard-----	75	Very limited Depth to saturated zone Ponding Frost action	1.00 1.00 0.50	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Droughty	1.00 1.00 0.92
Hamar-----	7	Very limited Depth to saturated zone Ponding Frost action	1.00 1.00 0.50	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Droughty	1.00 1.00 0.21
Syrene-----	7	Very limited Depth to saturated zone Ponding Frost action	1.00 1.00 0.50	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Droughty	1.00 1.00 0.30
Karlsruhe-----	3	Somewhat limited Frost action Depth to saturated zone	0.50 0.22	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Somewhat limited Depth to saturated zone	0.22

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I28A: Rosewood-----	3	Very limited Depth to saturated zone Ponding Frost action	1.00 1.00 0.50	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Strandquist-----	3	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Deerwood-----	2	Very limited Ponding Depth to saturated zone Frost action	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Cutbanks cave	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
I29A: Hattie-----	75	Very limited Low strength Shrink-swell Frost action Depth to saturated zone	1.00 1.00 0.50 0.10	Very limited Depth to saturated zone Cutbanks cave Too clayey	1.00 1.00 0.50	Very limited Too clayey Depth to saturated zone	1.00 0.10
Clearwater-----	12	Very limited Depth to saturated zone Frost action Low strength Shrink-swell Ponding	1.00 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding Too clayey	1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Too clayey Ponding	1.00 1.00 1.00
Reis-----	6	Very limited Depth to saturated zone Frost action Low strength Shrink-swell	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Too clayey	1.00 1.00 0.88	Very limited Depth to saturated zone Too clayey	1.00 1.00
Hattie, very cobbly	5	Very limited Low strength Shrink-swell Frost action Depth to saturated zone	1.00 1.00 0.50 0.10	Very limited Depth to saturated zone Cutbanks cave Too clayey	1.00 1.00 0.50	Very limited Too clayey Depth to saturated zone	1.00 0.10
Hilaire-----	2	Somewhat limited Frost action	0.50	Very limited Cutbanks cave Depth to saturated zone Too clayey	1.00 1.00 0.50	Not limited	

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I29D:							
Hattie-----	85	Very limited Low strength Shrink-swell Slope Frost action Depth to saturated zone	1.00 1.00 0.63 0.50 0.10	Very limited Depth to saturated zone Cutbanks cave Slope Too clayey	1.00 1.00 1.00 0.63 0.50	Very limited Too clayey Slope Depth to saturated zone	1.00 0.63 0.10
Clearwater-----	6	Very limited Depth to saturated zone Frost action Low strength Shrink-swell Ponding	1.00 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding Too clayey	1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Too clayey Ponding	1.00 1.00 1.00
Hattie, level-----	5	Very limited Low strength Shrink-swell Frost action Depth to saturated zone	1.00 1.00 0.50 0.10	Very limited Depth to saturated zone Cutbanks cave Too clayey	1.00 1.00 1.00 0.50	Very limited Too clayey Depth to saturated zone	1.00 0.10
Boyerlake-----	4	Very limited Low strength Shrink-swell Frost action Depth to saturated zone	1.00 1.00 0.50 0.10	Very limited Depth to saturated zone Too clayey Cutbanks cave	1.00 1.00 0.50 0.10	Very limited Too clayey Depth to saturated zone	1.00 0.10
I30A:							
Hedman-----	85	Very limited Depth to saturated zone Frost action Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Depth to saturated zone Ponding	1.00 1.00
Fram-----	5	Very limited Frost action	1.00	Very limited Depth to saturated zone Cutbanks cave	1.00 0.10	Not limited	
Strathcona-----	5	Very limited Depth to saturated zone Frost action Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Haug-----	3	Very limited Ponding Depth to saturated zone Frost action	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Cutbanks cave	1.00 1.00 0.10	Very limited Ponding Depth to saturated zone	1.00 1.00
Strandquist-----	2	Very limited Depth to saturated zone Frost action Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I31A: Hedman-----	50	Very limited Depth to saturated zone Frost action Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Depth to saturated zone Ponding	1.00 1.00
Fram-----	40	Very limited Frost action	1.00	Very limited Depth to saturated zone Cutbanks cave	1.00 0.10	Not limited	
Strathcona-----	5	Very limited Depth to saturated zone Frost action Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Haug-----	3	Very limited Ponding Depth to saturated zone Frost action	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Ponding Depth to saturated zone	1.00 1.00
Strandquist-----	2	Very limited Depth to saturated zone Frost action Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
I32A: Hilaire-----	75	Somewhat limited Frost action	0.50	Very limited Cutbanks cave Depth to saturated zone Too clayey	1.00 1.00 0.50	Not limited	
Espelie-----	12	Very limited Depth to saturated zone Frost action Low strength Shrink-swell Ponding	1.00 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding Too clayey	1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Ponding	1.00 1.00
Huot-----	5	Somewhat limited Frost action	0.50	Very limited Cutbanks cave Depth to saturated zone Too clayey	1.00 1.00 0.50	Not limited	
Flaming-----	2	Not limited		Very limited Cutbanks cave Depth to saturated zone	1.00 1.00	Somewhat limited Droughty	0.15

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>I32A:</b>							
Foxlake-----	2	Very limited Depth to saturated zone Frost action Low strength Shrink-swell Ponding	1.00 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Too clayey Cutbanks cave	1.00 1.00 0.50 0.10	Very limited Depth to saturated zone Ponding	1.00 1.00
Wheatville-----	2	Very limited Frost action Depth to saturated zone	1.00 0.90	Very limited Depth to saturated zone Too clayey Cutbanks cave	1.00 0.50 0.10	Somewhat limited Depth to saturated zone	0.90
Thiefriever-----	1	Very limited Depth to saturated zone Frost action Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding Too clayey	1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Ponding	1.00 1.00
Wyandotte-----	1	Very limited Depth to saturated zone Frost action Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding Too clayey	1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Ponding	1.00 1.00
<b>I33A:</b>							
Hilaire-----	75	Somewhat limited Frost action	0.50	Very limited Cutbanks cave Depth to saturated zone Too clayey	1.00 1.00 0.50	Not limited	
Espelie-----	12	Very limited Depth to saturated zone Frost action Low strength Shrink-swell Ponding	1.00 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding Too clayey	1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Ponding	1.00 1.00
Huot-----	5	Somewhat limited Frost action	0.50	Very limited Cutbanks cave Depth to saturated zone Too clayey	1.00 1.00 0.50	Not limited	
Flaming-----	2	Not limited		Very limited Cutbanks cave Depth to saturated zone	1.00 1.00	Somewhat limited Droughty	0.15

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I33A: Foxlake-----	2	Very limited Depth to saturated zone Frost action Low strength Shrink-swell Ponding	1.00 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Too clayey Cutbanks cave	1.00 1.00 0.50 0.10	Very limited Depth to saturated zone Ponding	1.00 1.00
Wheatville-----	2	Very limited Frost action Depth to saturated zone	1.00 0.90	Very limited Depth to saturated zone Too clayey Cutbanks cave	1.00 0.50 0.10	Somewhat limited Depth to saturated zone	0.90
Thiefriever-----	1	Very limited Depth to saturated zone Frost action Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding Too clayey	1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Ponding	1.00 1.00
Wyandotte-----	1	Very limited Depth to saturated zone Frost action Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding Too clayey	1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Ponding	1.00 1.00
I34A: Huot-----	75	Somewhat limited Frost action	0.50	Very limited Cutbanks cave Depth to saturated zone Too clayey	1.00 1.00 0.50	Not limited	
Thiefriever-----	12	Very limited Depth to saturated zone Frost action Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding Too clayey	1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Ponding	1.00 1.00
Hilaire-----	5	Somewhat limited Frost action	0.50	Very limited Cutbanks cave Depth to saturated zone Too clayey	1.00 1.00 0.50	Not limited	
Flaming-----	3	Not limited		Very limited Cutbanks cave Depth to saturated zone	1.00 1.00	Somewhat limited Droughty	0.15

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I34A: Foxlake-----	3	Very limited Depth to saturated zone Frost action Low strength Shrink-swell Ponding	 1.00 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Too clayey Cutbanks cave	 1.00 1.00 0.50 0.10	Very limited Depth to saturated zone Ponding	 1.00 1.00
Ulen-----	2	Somewhat limited Frost action Depth to saturated zone	 0.50 0.22	Very limited Depth to saturated zone Cutbanks cave	 1.00 1.00	Somewhat limited Depth to saturated zone	 0.22
I35A: Karlsruhe-----	70	Somewhat limited Frost action Depth to saturated zone	 0.50 0.22	Very limited Depth to saturated zone Cutbanks cave	 1.00 1.00	Somewhat limited Depth to saturated zone	 0.22
Syrene-----	10	Very limited Depth to saturated zone Ponding Frost action	 1.00 1.00 0.50	Very limited Depth to saturated zone Cutbanks cave Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Droughty	 1.00 1.00 0.30
Ulen-----	10	Somewhat limited Frost action Depth to saturated zone	 0.50 0.22	Very limited Depth to saturated zone Cutbanks cave	 1.00 1.00	Somewhat limited Depth to saturated zone	 0.22
Radium-----	5	Not limited		Very limited Cutbanks cave Depth to saturated zone	 1.00 0.96	Somewhat limited Droughty	 0.76
Rosewood-----	3	Very limited Depth to saturated zone Ponding Frost action	 1.00 1.00 0.50	Very limited Depth to saturated zone Cutbanks cave Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	 1.00 1.00
Sandberg-----	2	Not limited		Very limited Cutbanks cave	 1.00	Somewhat limited Droughty Gravel content	 0.85 0.01
I36A: Kittson-----	70	Somewhat limited Low strength Frost action	 0.78 0.50	Very limited Depth to saturated zone Cutbanks cave	 1.00 0.10	Not limited	
Roliss-----	12	Very limited Depth to saturated zone Frost action Ponding Low strength	 1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Ponding Cutbanks cave	 1.00 1.00 0.10	Very limited Depth to saturated zone Ponding	 1.00 1.00

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I36A: Hamerly-----	5	Very limited Frost action Depth to saturated zone Low strength	1.00 0.90 0.78	Very limited Depth to saturated zone Cutbanks cave	1.00 0.10	Somewhat limited Depth to saturated zone	0.90
Kratka-----	5	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Grimstad-----	3	Very limited Frost action Depth to saturated zone	1.00 0.78	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Somewhat limited Depth to saturated zone	0.78
Strandquist-----	3	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Foxhome-----	2	Somewhat limited Low strength Frost action	0.78 0.50	Very limited Cutbanks cave Depth to saturated zone	1.00 1.00	Not limited	
I37A: Kratka, depressional	45	Very limited Ponding Depth to saturated zone Frost action Low strength	1.00 1.00 1.00 0.78	Very limited Ponding Depth to saturated zone Cutbanks cave	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Strathcona, depressional-----	45	Very limited Ponding Depth to saturated zone Frost action Low strength	1.00 1.00 1.00 0.78	Very limited Ponding Depth to saturated zone Cutbanks cave	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Northwood-----	5	Very limited Ponding Depth to saturated zone Frost action Low strength	1.00 1.00 1.00 0.78	Very limited Ponding Depth to saturated zone Cutbanks cave	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>I37A:</b>							
Kratka-----	2	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00	Ponding	1.00
		Ponding	1.00	Ponding	1.00		
		Low strength	0.78				
<b>Strathcona-----</b>							
	2	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00	Ponding	1.00
		Ponding	1.00	Ponding	1.00		
		Low strength	0.78				
<b>Roliss-----</b>							
	1	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Cutbanks cave	0.10		
		Low strength	0.78				
<b>I38A:</b>							
Kratka-----	70	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00	Ponding	1.00
		Ponding	1.00	Ponding	1.00		
		Low strength	0.78				
<b>Smiley-----</b>							
	7	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Cutbanks cave	0.10		
		Low strength	0.78				
<b>Foldahl-----</b>							
	5	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
				Depth to saturated zone	1.00		
<b>Kratka, very cobbly</b>							
	5	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00	Ponding	1.00
		Ponding	1.00	Ponding	1.00		
		Low strength	0.78				
<b>Strathcona-----</b>							
	5	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00	Ponding	1.00
		Ponding	1.00	Ponding	1.00		
		Low strength	0.78				

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I38A: Kratka, depressional	3	Very limited Ponding Depth to saturated zone Frost action Low strength	1.00 1.00 1.00 0.78	Very limited Ponding Depth to saturated zone Cutbanks cave	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Strandquist-----	3	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Linveldt-----	2	Somewhat limited Frost action	0.50	Very limited Cutbanks cave Depth to saturated zone	1.00 1.00	Not limited	
I39A: Linveldt-----	65	Somewhat limited Frost action	0.50	Very limited Cutbanks cave Depth to saturated zone	1.00 1.00	Not limited	
Kratka-----	14	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Reiner-----	10	Somewhat limited Low strength Frost action	0.78 0.50	Very limited Depth to saturated zone Cutbanks cave	1.00 0.10	Not limited	
Smiley-----	5	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Ponding Cutbanks cave	1.00 1.00 0.10	Very limited Depth to saturated zone Ponding	1.00 1.00
Eckvoll-----	3	Somewhat limited Frost action	0.50	Very limited Cutbanks cave Depth to saturated zone	1.00 1.00	Not limited	
Foldahl-----	2	Somewhat limited Frost action	0.50	Very limited Cutbanks cave Depth to saturated zone	1.00 1.00	Not limited	
Pelan-----	1	Somewhat limited Low strength Frost action	0.78 0.50	Very limited Cutbanks cave Depth to saturated zone	1.00 1.00	Not limited	

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>I40B:</b>							
Maddock-----	85	Not limited		Very limited Cutbanks cave	1.00	Somewhat limited Droughty	0.27
Flaming-----	5	Not limited		Very limited Cutbanks cave Depth to saturated zone	1.00 1.00	Somewhat limited Droughty	0.15
Sandberg-----	5	Not limited		Very limited Cutbanks cave	1.00	Somewhat limited Droughty Gravel content	0.85 0.01
Halverson-----	3	Not limited		Very limited Cutbanks cave	1.00	Not limited	
Hamar-----	2	Very limited Depth to saturated zone Ponding Frost action	1.00 1.00 0.50	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Droughty	1.00 1.00 1.00 0.21
<b>I40F:</b>							
Maddock-----	90	Very limited Slope	1.00	Very limited Cutbanks cave Slope	1.00 1.00	Very limited Slope Droughty	1.00 0.27
Flaming-----	5	Not limited		Very limited Cutbanks cave Depth to saturated zone	1.00 1.00	Somewhat limited Droughty	0.15
Sandberg-----	5	Not limited		Very limited Cutbanks cave	1.00	Somewhat limited Droughty Gravel content	0.85 0.01
<b>I41A:</b>							
Markey-----	80	Very limited Ponding Depth to saturated zone Frost action	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Cutbanks cave Content of organic matter	1.00 1.00 1.00 1.00	Very limited Ponding Content of organic matter Depth to saturated zone	1.00 1.00 1.00 1.00
Deerwood-----	12	Very limited Ponding Depth to saturated zone Frost action	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Cutbanks cave	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Berner-----	2	Very limited Ponding Depth to saturated zone Frost action	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Cutbanks cave Content of organic matter	1.00 1.00 1.00 1.00	Very limited Ponding Content of organic matter Depth to saturated zone	1.00 1.00 1.00

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I41A:							
Hamar-----	2	Very limited		Very limited		Very limited	
		Depth to	1.00	Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone		saturated zone	
		Ponding	1.00	Cutbanks cave	1.00	Ponding	1.00
		Frost action	0.50	Ponding	1.00	Droughty	0.21
Seelyeville-----	2	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to	1.00	Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone		saturated zone	
		Frost action	1.00	Content of	1.00		
				organic matter			
				Cutbanks cave	0.10		
Syrene-----	2	Very limited		Very limited		Very limited	
		Depth to	1.00	Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone		saturated zone	
		Ponding	1.00	Cutbanks cave	1.00	Ponding	1.00
		Frost action	0.50	Ponding	1.00	Droughty	0.30
I42A:							
Markey, ponded-----	85	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to	1.00	Depth to	1.00	Content of	1.00
		saturated zone		saturated zone		organic matter	
		Frost action	1.00	Cutbanks cave	1.00	Depth to	1.00
				Content of	1.00	saturated zone	
				organic matter			
Markey-----	5	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to	1.00	Depth to	1.00	Content of	1.00
		saturated zone		saturated zone		organic matter	
		Frost action	1.00	Cutbanks cave	1.00	Depth to	1.00
				Content of	1.00	saturated zone	
				organic matter			
Deerwood-----	4	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to	1.00	Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone		saturated zone	
		Frost action	1.00	Cutbanks cave	1.00		
Seelyeville, ponded	4	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to	1.00	Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone		saturated zone	
		Frost action	1.00	Content of	1.00		
				organic matter			
				Cutbanks cave	0.10		
Hamar-----	1	Very limited		Very limited		Very limited	
		Depth to	1.00	Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone		saturated zone	
		Ponding	1.00	Cutbanks cave	1.00	Ponding	1.00
		Frost action	0.50	Ponding	1.00	Droughty	0.21

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I42A: Hangaard-----	1	Very limited Depth to saturated zone Ponding Frost action	1.00 1.00 0.50	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Droughty	1.00 1.00 0.92
I43A: Mavie-----	70	Very limited Depth to saturated zone Frost action Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Droughty	1.00 1.00 0.01
Vallers-----	10	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Ponding Cutbanks cave	1.00 1.00 0.10	Very limited Depth to saturated zone Ponding	1.00 1.00
Strandquist-----	7	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Strathcona-----	5	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Strathcona, depressional-----	3	Very limited Ponding Depth to saturated zone Frost action Low strength	1.00 1.00 1.00 0.78	Very limited Ponding Depth to saturated zone Cutbanks cave	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Foxhome-----	2	Somewhat limited Low strength Frost action	0.78 0.50	Very limited Cutbanks cave Depth to saturated zone	1.00 1.00	Not limited	
Karlsruhe-----	2	Somewhat limited Frost action Depth to saturated zone	0.50 0.22	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Somewhat limited Depth to saturated zone	0.22
Grimstad-----	1	Very limited Frost action Depth to saturated zone	1.00 0.78	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Somewhat limited Depth to saturated zone	0.78

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I44A: Newfolden-----	75	Somewhat limited Low strength Frost action	0.78 0.50	Very limited Depth to saturated zone Cutbanks cave	1.00 0.10	Not limited	
Smiley-----	12	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Ponding Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Depth to saturated zone Ponding	1.00 1.00
Boash-----	8	Very limited Depth to saturated zone Frost action Low strength Shrink-swell Ponding	1.00 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Too clayey Cutbanks cave	1.00 1.00 1.00 0.50 0.10	Very limited Depth to saturated zone Ponding	1.00 1.00
Linveldt-----	4	Somewhat limited Frost action	0.50	Very limited Cutbanks cave Depth to saturated zone	1.00 1.00	Not limited	
Hapludolls-----	1	Somewhat limited Slope Frost action Flooding	0.63 0.50 0.40	Somewhat limited Slope Cutbanks cave	0.63 0.10	Somewhat limited Slope	0.63
I45A: Northwood-----	75	Very limited Ponding Depth to saturated zone Frost action Low strength	1.00 1.00 1.00 0.78	Very limited Ponding Depth to saturated zone Cutbanks cave	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Hamre-----	10	Very limited Ponding Depth to saturated zone Frost action Low strength	1.00 1.00 1.00 0.78	Very limited Ponding Depth to saturated zone Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Ponding Content of organic matter Depth to saturated zone	1.00 1.00 1.00
Berner-----	5	Very limited Ponding Depth to saturated zone Frost action	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Cutbanks cave Content of organic matter	1.00 1.00 1.00 1.00	Very limited Ponding Content of organic matter Depth to saturated zone	1.00 1.00 1.00
Kratka-----	5	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I45A:							
Strandquist-----	3	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Roliss-----	2	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Ponding Cutbanks cave	1.00 1.00 0.10	Very limited Depth to saturated zone Ponding	1.00 1.00
I46A:							
Pits-----	85	Not rated		Not rated		Not rated	
Udipsamments-----	10	Very limited Slope	1.00	Very limited Cutbanks cave Slope	1.00 1.00	Very limited Slope Droughty Too sandy	1.00 0.57 0.50
Radium-----	2	Not limited		Very limited Cutbanks cave Depth to saturated zone	1.00 0.96	Somewhat limited Droughty	0.76
Maddock-----	1	Not limited		Very limited Cutbanks cave	1.00	Somewhat limited Droughty	0.27
Marquette-----	1	Not limited		Very limited Cutbanks cave	1.00	Somewhat limited Droughty	0.85
Sandberg-----	1	Not limited		Very limited Cutbanks cave	1.00	Somewhat limited Droughty Gravel content	0.85 0.01
I47A:							
Poppleton-----	75	Not limited		Very limited Cutbanks cave Depth to saturated zone	1.00 1.00	Somewhat limited Droughty	0.09
Flaming-----	12	Not limited		Very limited Cutbanks cave Depth to saturated zone	1.00 1.00	Somewhat limited Droughty	0.15
Garborg-----	5	Somewhat limited Depth to saturated zone Frost action	0.78 0.50	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Somewhat limited Depth to saturated zone Droughty	0.78 0.02
Hamar-----	3	Very limited Depth to saturated zone Ponding Frost action	1.00 1.00 0.50	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Droughty	1.00 1.00 0.21

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I47A: Radium-----	2	Not limited		Very limited Cutbanks cave Depth to saturated zone	1.00 0.96	Somewhat limited Droughty	0.76
Ulen-----	2	Somewhat limited Frost action Depth to saturated zone	0.50 0.22	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Somewhat limited Depth to saturated zone	0.22
Maddock-----	1	Not limited		Very limited Cutbanks cave	1.00	Somewhat limited Droughty	0.27
I48A: Radium-----	75	Not limited		Very limited Cutbanks cave Depth to saturated zone	1.00 0.96	Somewhat limited Droughty	0.76
Sandberg-----	7	Not limited		Very limited Cutbanks cave	1.00	Somewhat limited Droughty Gravel content	0.85 0.01
Oylen-----	5	Somewhat limited Frost action	0.50	Very limited Cutbanks cave Depth to saturated zone	1.00 0.96	Somewhat limited Droughty	0.01
Flaming-----	4	Not limited		Very limited Cutbanks cave Depth to saturated zone	1.00 1.00	Somewhat limited Droughty	0.15
Garborg-----	3	Somewhat limited Depth to saturated zone Frost action	0.78 0.50	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Somewhat limited Depth to saturated zone Droughty	0.78 0.02
Hangaard-----	3	Very limited Depth to saturated zone Ponding Frost action	1.00 1.00 0.50	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Droughty	1.00 1.00 1.00 0.92
Hamar-----	2	Very limited Depth to saturated zone Ponding Frost action	1.00 1.00 0.50	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Droughty	1.00 1.00 1.00 0.21
Poppleton-----	1	Not limited		Very limited Cutbanks cave Depth to saturated zone	1.00 1.00	Somewhat limited Droughty	0.09

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>I49A:</b>							
Rauville-----	80	Very limited Ponding Depth to saturated zone Frost action Flooding Low strength	1.00 1.00 1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone Cutbanks cave	1.00 1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone	1.00 1.00 1.00
Fluvaquents-----	12	Very limited Ponding Depth to saturated zone Frost action Flooding	1.00 1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone Cutbanks cave	1.00 1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone	1.00 1.00 1.00
Water-----	5	Not rated		Not rated		Not rated	
Lamoure-----	3	Very limited Depth to saturated zone Frost action Flooding Low strength Ponding	1.00 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding Flooding	1.00 1.00 1.00 0.80	Very limited Flooding Depth to saturated zone Ponding	1.00 1.00
<b>I50A:</b>							
Reiner-----	70	Somewhat limited Low strength Frost action	0.78 0.50	Very limited Depth to saturated zone Cutbanks cave	1.00 0.10	Not limited	
Smiley-----	12	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Ponding Cutbanks cave	1.00 1.00 0.10	Very limited Depth to saturated zone Ponding	1.00 1.00
Reiner, very cobbly	7	Somewhat limited Low strength Frost action	0.78 0.50	Very limited Depth to saturated zone Cutbanks cave	1.00 0.10	Not limited	
Linveltd-----	5	Somewhat limited Frost action	0.50	Very limited Cutbanks cave Depth to saturated zone	1.00 1.00	Not limited	
Eckvoll-----	3	Somewhat limited Frost action	0.50	Very limited Cutbanks cave Depth to saturated zone	1.00 1.00	Not limited	
Kratka-----	3	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I51A:							
Reiner-----	65	Somewhat limited Low strength Frost action	 0.78 0.50	Very limited Depth to saturated zone Cutbanks cave	 1.00 0.10	Not limited	
Smiley-----	9	Very limited Depth to saturated zone Frost action Ponding Low strength	 1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Ponding Cutbanks cave	 1.00 1.00 0.10	Very limited Depth to saturated zone Ponding	 1.00 1.00
Reiner fine sandy loam-----	8	Somewhat limited Low strength Frost action	 0.78 0.50	Very limited Depth to saturated zone Cutbanks cave	 1.00 0.10	Not limited	
Linveltd-----	7	Somewhat limited Frost action	 0.50	Very limited Cutbanks cave Depth to saturated zone	 1.00 1.00	Not limited	
Kratka-----	5	Very limited Depth to saturated zone Frost action Ponding Low strength	 1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Cutbanks cave Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	 1.00 1.00
Eckvoll-----	3	Somewhat limited Frost action	 0.50	Very limited Cutbanks cave Depth to saturated zone	 1.00 1.00	Not limited	
Reiner, very cobbly	3	Somewhat limited Low strength Frost action	 0.78 0.50	Very limited Depth to saturated zone Cutbanks cave	 1.00 0.10	Not limited	
I52A:							
Reis-----	55	Very limited Depth to saturated zone Frost action Low strength Shrink-swell	 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Too clayey	 1.00 1.00 0.88	Very limited Depth to saturated zone Too clayey	 1.00 1.00
Clearwater-----	30	Very limited Depth to saturated zone Frost action Low strength Shrink-swell Ponding	 1.00 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding Too clayey	 1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Too clayey Ponding	 1.00 1.00 1.00

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I52A: Clearwater, very cobbly-----	5	Very limited Depth to saturated zone Frost action Low strength Shrink-swell Ponding	1.00 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding Too clayey	1.00 1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Too clayey Ponding	1.00 1.00 1.00
Clearwater, depressional-----	3	Very limited Ponding Depth to saturated zone Frost action Low strength Shrink-swell	1.00 1.00 1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Cutbanks cave Too clayey	1.00 1.00 1.00 1.00 0.50	Very limited Ponding Depth to saturated zone	1.00 1.00
Espelie-----	3	Very limited Depth to saturated zone Frost action Low strength Shrink-swell Ponding	1.00 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding Too clayey	1.00 1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Ponding	1.00 1.00
Hattie-----	3	Very limited Low strength Shrink-swell Frost action Depth to saturated zone	1.00 1.00 0.50 0.10	Very limited Depth to saturated zone Cutbanks cave Too clayey	1.00 1.00 1.00 0.50	Very limited Too clayey Depth to saturated zone	1.00 0.10
Wyandotte-----	1	Very limited Depth to saturated zone Frost action Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding Too clayey	1.00 1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Ponding	1.00 1.00
I53A: Roliss-----	75	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Ponding Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Depth to saturated zone Ponding	1.00 1.00
Kratka-----	8	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I53A: Roliss, very cobbly	7	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Ponding Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Depth to saturated zone Ponding	1.00 1.00 1.00
Kittson-----	5	Somewhat limited Low strength Frost action	0.78 0.50	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00 0.10	Not limited	
Roliss, depressional	3	Very limited Ponding Depth to saturated zone Frost action Low strength	1.00 1.00 1.00 0.78	Very limited Ponding Depth to saturated zone Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Ponding Depth to saturated zone	1.00 1.00 1.00
Smiley-----	2	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Ponding Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Depth to saturated zone Ponding	1.00 1.00 1.00
I54A: Roliss, depressional	80	Very limited Ponding Depth to saturated zone Frost action Low strength	1.00 1.00 1.00 1.00 0.78	Very limited Ponding Depth to saturated zone Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Ponding Depth to saturated zone	1.00 1.00 1.00
Roliss-----	12	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Ponding Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Depth to saturated zone Ponding	1.00 1.00 1.00
Hamre-----	5	Very limited Ponding Depth to saturated zone Frost action Low strength	1.00 1.00 1.00 1.00 0.78	Very limited Ponding Depth to saturated zone Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Ponding Content of organic matter Depth to saturated zone	1.00 1.00 1.00 1.00
Kratka-----	3	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00 1.00

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I55A:							
Rosewood-----	75	Very limited Depth to saturated zone Ponding Frost action	1.00 1.00 0.50	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Ulen-----	10	Somewhat limited Frost action Depth to saturated zone	0.50 0.22	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Somewhat limited Depth to saturated zone	0.22
Hamar-----	6	Very limited Depth to saturated zone Ponding Frost action	1.00 1.00 0.50	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Droughty	1.00 1.00 0.21
Rosewood, depressional-----	3	Very limited Ponding Depth to saturated zone Frost action	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Cutbanks cave	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Syrene-----	3	Very limited Depth to saturated zone Ponding Frost action	1.00 1.00 0.50	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Droughty	1.00 1.00 0.30
Karlsruhe-----	1	Somewhat limited Frost action Depth to saturated zone	0.50 0.22	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Somewhat limited Depth to saturated zone	0.22
Strathcona-----	1	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Thiefriever-----	1	Very limited Depth to saturated zone Frost action Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding Too clayey	1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Ponding	1.00 1.00
I56A:							
Rosewood-----	50	Very limited Depth to saturated zone Ponding Frost action	1.00 1.00 0.50	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>I56A:</b>							
Venlo-----	40	Very limited Ponding Depth to saturated zone Frost action	1.00 1.00 0.50	Very limited Ponding Depth to saturated zone Cutbanks cave	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Droughty	1.00 1.00 0.01
Deerwood-----	3	Very limited Ponding Depth to saturated zone Frost action	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Cutbanks cave	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Syrene-----	3	Very limited Depth to saturated zone Ponding Frost action	1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Droughty	1.00 1.00 1.00 0.30
Ulen-----	2	Somewhat limited Frost action Depth to saturated zone	0.50 0.22	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Somewhat limited Depth to saturated zone	0.22
Strathcona-----	1	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00 1.00
Thiefriever-----	1	Very limited Depth to saturated zone Frost action Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding Too clayey	1.00 1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Ponding	1.00 1.00 1.00
<b>I57B:</b>							
Sandberg-----	50	Not limited		Very limited Cutbanks cave	1.00	Somewhat limited Droughty Gravel content	0.85 0.01
Radium-----	25	Not limited		Very limited Cutbanks cave Depth to saturated zone	1.00 0.96	Somewhat limited Droughty	0.76
Sioux-----	8	Not limited		Very limited Cutbanks cave	1.00	Somewhat limited Droughty	0.80
Oylen-----	7	Somewhat limited Frost action	0.50	Very limited Cutbanks cave Depth to saturated zone	1.00 0.96	Somewhat limited Droughty	0.01

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I57B: Flaming-----	5	Not limited		Very limited Cutbanks cave Depth to saturated zone	1.00 1.00	Somewhat limited Droughty	0.15
Garborg-----	5	Somewhat limited Depth to saturated zone Frost action	0.78 0.50	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Somewhat limited Depth to saturated zone Droughty	0.78 0.02
I58A: Seelyeville-----	90	Very limited Ponding Depth to saturated zone Frost action	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Content of organic matter Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Ponding Depth to saturated zone	1.00 1.00
Cathro-----	3	Very limited Ponding Depth to saturated zone Frost action Low strength	1.00 1.00 1.00 0.78	Very limited Ponding Depth to saturated zone Content of organic matter Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Ponding Content of organic matter Depth to saturated zone	1.00 1.00 1.00
Dora-----	3	Very limited Ponding Depth to saturated zone Frost action	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Content of organic matter Too clayey Cutbanks cave	1.00 1.00 1.00 0.88 0.10	Very limited Ponding Content of organic matter Depth to saturated zone	1.00 1.00 1.00
Markey-----	3	Very limited Ponding Depth to saturated zone Frost action	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Cutbanks cave Content of organic matter	1.00 1.00 1.00 1.00	Very limited Ponding Content of organic matter Depth to saturated zone	1.00 1.00 1.00
Berner-----	1	Very limited Ponding Depth to saturated zone Frost action	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Cutbanks cave Content of organic matter	1.00 1.00 1.00 1.00	Very limited Ponding Content of organic matter Depth to saturated zone	1.00 1.00 1.00
I59A: Smiley-----	65	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Ponding Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I59A: Smiley, very cobbly	10	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Ponding Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Depth to saturated zone Ponding	1.00 1.00 1.00
Kratka-----	9	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00 1.00
Roliss-----	5	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Ponding Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Depth to saturated zone Ponding	1.00 1.00
Reiner-----	4	Somewhat limited Low strength Frost action	0.78 0.50	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00 0.10	Not limited	
Linveltd-----	3	Somewhat limited Frost action	0.50	Very limited Cutbanks cave Depth to saturated zone	1.00 1.00	Not limited	
Smiley, depressiona	3	Very limited Ponding Depth to saturated zone Frost action Low strength	1.00 1.00 1.00 0.78	Very limited Ponding Depth to saturated zone Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Ponding Depth to saturated zone	1.00 1.00
Strandquist-----	1	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
I60A: Smiley, depressiona	80	Very limited Ponding Depth to saturated zone Frost action Low strength	1.00 1.00 1.00 0.78	Very limited Ponding Depth to saturated zone Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Ponding Depth to saturated zone	1.00 1.00
Smiley-----	10	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Ponding Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I60A:							
Hamre-----	5	Very limited Ponding Depth to saturated zone Frost action Low strength	 1.00 1.00 1.00 0.78	Very limited Ponding Depth to saturated zone Cutbanks cave	 1.00 1.00 0.10	Very limited Ponding Content of organic matter Depth to saturated zone	 1.00 1.00 1.00
Kratka-----	5	Very limited Depth to saturated zone Frost action Ponding Low strength	 1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Cutbanks cave Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	 1.00 1.00
I61A:							
Strandquist-----	70	Very limited Depth to saturated zone Frost action Ponding Low strength	 1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Cutbanks cave Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	 1.00 1.00
Mavie-----	8	Very limited Depth to saturated zone Frost action Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Droughty	 1.00 1.00 0.01
Roliss-----	7	Very limited Depth to saturated zone Frost action Ponding Low strength	 1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Ponding Cutbanks cave	 1.00 1.00 0.10	Very limited Depth to saturated zone Ponding	 1.00 1.00
Kratka-----	5	Very limited Depth to saturated zone Frost action Ponding Low strength	 1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Cutbanks cave Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	 1.00 1.00
Foxhome-----	4	Somewhat limited Low strength Frost action	 0.78 0.50	Very limited Cutbanks cave Depth to saturated zone	 1.00 1.00	Not limited	
Hangaard-----	3	Very limited Depth to saturated zone Ponding Frost action	 1.00 1.00 0.50	Very limited Depth to saturated zone Cutbanks cave Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Droughty	 1.00 1.00 0.92
Northwood-----	3	Very limited Ponding Depth to saturated zone Frost action Low strength	 1.00 1.00 1.00 0.78	Very limited Ponding Depth to saturated zone Cutbanks cave	 1.00 1.00 1.00	Very limited Ponding Depth to saturated zone	 1.00 1.00

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I62A: Syrene-----	70	Very limited Depth to saturated zone Ponding Frost action	1.00 1.00 0.50	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Droughty	1.00 1.00 0.30
Rosewood-----	11	Very limited Depth to saturated zone Ponding Frost action	1.00 1.00 0.50	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Hangaard-----	5	Very limited Depth to saturated zone Ponding Frost action	1.00 1.00 0.50	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Droughty	1.00 1.00 0.92
Karlsruhe-----	4	Somewhat limited Frost action Depth to saturated zone	0.50 0.22	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Somewhat limited Depth to saturated zone	0.22
Deerwood-----	3	Very limited Ponding Depth to saturated zone Frost action	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Cutbanks cave	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Hamar-----	3	Very limited Depth to saturated zone Ponding Frost action	1.00 1.00 0.50	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Droughty	1.00 1.00 0.21
Strandquist-----	2	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Radium-----	1	Not limited		Very limited Cutbanks cave Depth to saturated zone	1.00 0.96	Somewhat limited Droughty	0.76
Wyandotte-----	1	Very limited Depth to saturated zone Frost action Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding Too clayey	1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I63A:							
Thiefriever-----	70	Very limited Depth to saturated zone Frost action Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding Too clayey	1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Ponding	1.00 1.00
Espelie-----	10	Very limited Depth to saturated zone Frost action Low strength Shrink-swell Ponding	1.00 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding Too clayey	1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Ponding	1.00 1.00
Foxlake-----	7	Very limited Depth to saturated zone Frost action Low strength Shrink-swell Ponding	1.00 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Too clayey Cutbanks cave	1.00 1.00 0.50 0.10	Very limited Depth to saturated zone Ponding	1.00 1.00
Huot-----	5	Somewhat limited Frost action	0.50	Very limited Cutbanks cave Depth to saturated zone Too clayey	1.00 1.00 0.50	Not limited	
Clearwater, depressional-----	3	Very limited Ponding Depth to saturated zone Frost action Low strength Shrink-swell	1.00 1.00 1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Cutbanks cave Too clayey	1.00 1.00 1.00 0.50	Very limited Ponding Depth to saturated zone	1.00 1.00
Rosewood-----	3	Very limited Depth to saturated zone Ponding Frost action	1.00 1.00 0.50	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Ulen-----	1	Somewhat limited Frost action Depth to saturated zone	0.50 0.22	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Somewhat limited Depth to saturated zone	0.22
Wyandotte-----	1	Very limited Depth to saturated zone Frost action Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding Too clayey	1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I64A:							
Ulen-----	70	Somewhat limited Frost action Depth to saturated zone	0.50 0.22	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Somewhat limited Depth to saturated zone	0.22
Rosewood-----	10	Very limited Depth to saturated zone Ponding Frost action	1.00 1.00 0.50	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Flaming-----	8	Not limited		Very limited Cutbanks cave Depth to saturated zone	1.00 1.00	Somewhat limited Droughty	0.15
Karlsruhe-----	5	Somewhat limited Frost action Depth to saturated zone	0.50 0.22	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Somewhat limited Depth to saturated zone	0.22
Radium-----	3	Not limited		Very limited Cutbanks cave Depth to saturated zone	1.00 0.96	Somewhat limited Droughty	0.76
Strathcona-----	2	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Thiefriver-----	2	Very limited Depth to saturated zone Frost action Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding Too clayey	1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Ponding	1.00 1.00
I65A:							
Ulen-----	70	Somewhat limited Frost action Depth to saturated zone	0.50 0.22	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Somewhat limited Depth to saturated zone	0.22
Rosewood-----	10	Very limited Depth to saturated zone Ponding Frost action	1.00 1.00 0.50	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Flaming-----	6	Not limited		Very limited Cutbanks cave Depth to saturated zone	1.00 1.00	Somewhat limited Droughty	0.15

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I65A: Poppleton-----	4	Not limited		Very limited Cutbanks cave Depth to saturated zone	1.00 1.00	Somewhat limited Droughty	0.09
Karlsruhe-----	3	Somewhat limited Frost action Depth to saturated zone	0.50 0.22	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Somewhat limited Depth to saturated zone	0.22
Radium-----	3	Not limited		Very limited Cutbanks cave Depth to saturated zone	1.00 0.96	Somewhat limited Droughty	0.76
Strathcona-----	2	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Thiefriever-----	2	Very limited Depth to saturated zone Frost action Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding Too clayey	1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Ponding	1.00 1.00
I66A: Vallars-----	75	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Ponding Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Depth to saturated zone Ponding	1.00 1.00
Vallars, very cobbly	7	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Ponding Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Depth to saturated zone Ponding	1.00 1.00
Hamerly-----	6	Very limited Frost action Depth to saturated zone Low strength	1.00 0.90 0.78	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Somewhat limited Depth to saturated zone	0.90
Grimstad-----	3	Very limited Frost action Depth to saturated zone	1.00 0.78	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Somewhat limited Depth to saturated zone	0.78

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I66A:							
Mavie-----	3	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00	Ponding	1.00
		Ponding	1.00	Ponding	1.00	Droughty	0.01
Roliss, depressional							
	3	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	0.10		
		Low strength	0.78				
Strathcona-----							
	3	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00	Ponding	1.00
		Ponding	1.00	Ponding	1.00		
		Low strength	0.78				
I67A:							
Wheatville-----	70	Very limited		Very limited		Somewhat limited	
		Frost action	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.90
		Depth to saturated zone	0.90	Too clayey	0.50		
				Cutbanks cave	0.10		
Augsburg-----							
	13	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00	Ponding	1.00
		Ponding	1.00	Ponding	1.00		
				Too clayey	0.50		
Glyndon-----							
	8	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00		
Foxlake-----							
	5	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Ponding	1.00	Ponding	1.00
		Low strength	1.00	Too clayey	0.50		
		Shrink-swell	1.00	Cutbanks cave	0.10		
		Ponding	1.00				
Hilaire-----							
	2	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
				Depth to saturated zone	1.00		
				Too clayey	0.50		
Ulen-----							
	2	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Depth to saturated zone	1.00	Depth to saturated zone	0.22
		Depth to saturated zone	0.22	Cutbanks cave	1.00		

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>I68A:</b>							
Wheatville-----	70	Very limited Frost action Depth to saturated zone	1.00 0.90	Very limited Depth to saturated zone Too clayey Cutbanks cave	1.00 0.50 0.10	Somewhat limited Depth to saturated zone	0.90
Augsburg-----	13	Very limited Depth to saturated zone Frost action Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding Too clayey	1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Ponding	1.00 1.00
Glyndon-----	8	Very limited Depth to saturated zone Frost action	1.00 1.00	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Very limited Depth to saturated zone	1.00
Foxlake-----	5	Very limited Depth to saturated zone Frost action Low strength Shrink-swell Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Too clayey Cutbanks cave	1.00 1.00 0.50 0.10	Very limited Depth to saturated zone Ponding	1.00 1.00
Hilaire-----	2	Somewhat limited Frost action	0.50	Very limited Cutbanks cave Depth to saturated zone Too clayey	1.00 1.00 0.50	Not limited	
Ulen-----	2	Somewhat limited Frost action Depth to saturated zone	0.50 0.22	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Somewhat limited Depth to saturated zone	0.22
<b>I69A:</b>							
Wyandotte-----	65	Very limited Depth to saturated zone Frost action Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding Too clayey	1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Ponding	1.00 1.00
Foxlake-----	10	Very limited Depth to saturated zone Frost action Low strength Shrink-swell Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Too clayey Cutbanks cave	1.00 1.00 0.50 0.10	Very limited Depth to saturated zone Ponding	1.00 1.00

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I69A: Espelie-----	8	Very limited Depth to saturated zone Frost action Low strength Shrink-swell Ponding	1.00 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding Too clayey	1.00 1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Ponding	1.00 1.00 1.00
Clearwater, depressional-----	5	Very limited Ponding Depth to saturated zone Frost action Low strength Shrink-swell	1.00 1.00 1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Cutbanks cave Too clayey	1.00 1.00 1.00 1.00 0.50	Very limited Ponding Depth to saturated zone	1.00 1.00 1.00
Thiefriver-----	5	Very limited Depth to saturated zone Frost action Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding Too clayey	1.00 1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Ponding	1.00 1.00 1.00
Karlsruhe-----	4	Somewhat limited Frost action Depth to saturated zone	0.50 0.22	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00 1.00	Somewhat limited Depth to saturated zone	0.22
Syrene-----	3	Very limited Depth to saturated zone Ponding Frost action	1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Droughty	1.00 1.00 1.00 0.30
I70A: Strathcona-----	70	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00 1.00
Kratka-----	10	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00 1.00
Roliss-----	6	Very limited Depth to saturated zone Frost action Ponding Low strength	1.00 1.00 1.00 1.00 0.78	Very limited Depth to saturated zone Ponding Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Depth to saturated zone Ponding	1.00 1.00 1.00

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I70A:							
Grimstad-----	5	Very limited Frost action Depth to saturated zone	1.00 0.78	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Somewhat limited Depth to saturated zone	0.78
Mavie-----	3	Very limited Depth to saturated zone Frost action Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Droughty	1.00 1.00 0.01
Rosewood-----	3	Very limited Depth to saturated zone Ponding Frost action	1.00 1.00 0.50	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Strathcona, depression-----	3	Very limited Ponding Depth to saturated zone Frost action Low strength	1.00 1.00 1.00 0.78	Very limited Ponding Depth to saturated zone Cutbanks cave	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
M-W: Miscellaneous water	100	Not rated		Not rated		Not rated	
W: Water-----	100	Not rated		Not rated		Not rated	

Table 20a.--Construction Materials

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The ratings given for the thickest layer are for the thickest layer above and excluding the bottom layer. The numbers in the value columns range from 0.00 to 0.99. The greater the value, the greater the likelihood that the bottom layer or thickest layer of the soil is a source of sand or gravel. "Not rated" indicates that data are not available or that no rating is applicable. See text for further explanation of ratings in this table)

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
<b>B109A:</b>					
Bowstring-----	45	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Fluvaquents-----	40	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.01
		Thickest layer	0.00	Bottom layer	0.03
Hapludalfs-----	5	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Seelyeville-----	5	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Water-----	5	Not rated		Not rated	
<b>B200A:</b>					
Garnes-----	70	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Chilgren-----	13	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Eckvoll-----	5	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.33
Garnes, very stony--	5	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Grygla-----	4	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.16
Pelan-----	3	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
<b>B201A:</b>					
Chilgren-----	75	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Table 20a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
<b>B201A:</b>					
Garnes-----	9	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Grygla-----	5	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.16
Grygla, depressional	5	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.16
Hamre-----	5	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Pelan-----	1	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
<b>B202A:</b>					
Cathro-----	80	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Hamre-----	8	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Chilgren-----	3	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Northwood-----	3	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.16
Berner-----	2	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Grygla-----	2	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.16
Seelyeville-----	2	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
<b>B203A:</b>					
Northwood-----	75	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.16
Hamre-----	10	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Table 20a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
<b>B203A:</b>					
Grygla-----	7	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.16
Berner-----	5	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Chilgren-----	3	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
<b>B204A:</b>					
Roliss-----	75	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Grygla-----	8	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.16
Chilgren-----	5	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Garnes-----	5	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Roliss, depressional	5	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Hamre-----	2	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
<b>B205A:</b>					
Berner-----	80	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Northwood-----	7	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.16
Grygla-----	5	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.16
Cathro-----	3	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Hamre-----	3	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Table 20a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
B205A: Seelyeville-----	2	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
B206A: Hamre-----	80	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Chilgren-----	8	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Northwood-----	5	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.16
Cathro-----	3	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Grygla-----	2	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.16
Roliss-----	2	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
I1A: Augsburg-----	75	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Borup-----	10	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Foxlake-----	5	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Augsburg, depressional-----	3	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Wheatville-----	3	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Glyndon-----	2	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Espelie-----	1	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.13

Table 20a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
I1A:					
Hattie-----	1	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
I2A:					
Augsburg-----	75	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Borup-----	10	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Foxlake-----	5	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Augsburg, depressional-----	3	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Wheatville-----	3	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Glyndon-----	2	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Espelie-----	1	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.13
Hattie-----	1	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
I3A:					
Berner-----	80	Poor		Not rated	
		Bottom layer	0.00		
		Thickest layer	0.00		
Northwood-----	7	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.13
Kratka-----	5	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Hamre-----	3	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Strathcona-----	3	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.25

Table 20a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
I3A: Seelyeville-----	2	Poor		Not rated	
		Bottom layer	0.00		
		Thickest layer	0.00		
I4A: Berner-----	30	Poor		Not rated	
		Bottom layer	0.00		
		Thickest layer	0.00		
Rosewood, depressional-----	30	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.02
		Thickest layer	0.00	Bottom layer	0.25
Strathcona, depressional-----	30	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.25
Rosewood-----	4	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.02
		Thickest layer	0.00	Bottom layer	0.25
Deerwood-----	2	Poor		Not rated	
		Bottom layer	0.00		
		Thickest layer	0.00		
Mavie-----	2	Fair		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.12	Thickest layer	0.61
Strathcona-----	2	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.25
I5A: Borup-----	75	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Glyndon-----	9	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Rosewood-----	8	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.02
		Thickest layer	0.00	Bottom layer	0.25
Augsburg-----	5	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Augsburg, depressional-----	3	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Table 20a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
I6A:					
Borup-----	75	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Glyndon-----	9	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Rosewood-----	8	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.02
		Thickest layer	0.00	Bottom layer	0.25
Augsburg-----	5	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Augsburg, depressional-----	3	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
I7A:					
Bowstring-----	45	Poor		Not rated	
		Bottom layer	0.00		
		Thickest layer	0.00		
Fluvaquents-----	45	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.03
Hapludolls-----	5	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Water-----	5	Not rated		Not rated	
I8A:					
Cathro-----	80	Poor		Not rated	
		Bottom layer	0.00		
		Thickest layer	0.00		
Hamre-----	8	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Northwood-----	3	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.13
Roliss-----	3	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Berner-----	2	Poor		Not rated	
		Bottom layer	0.00		
		Thickest layer	0.00		

Table 20a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
<b>I8A:</b>					
Kratka-----	2	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Seelyeville-----	2	Poor		Not rated	
		Bottom layer	0.00		
		Thickest layer	0.00		
<b>I9A:</b>					
Clearwater-----	80	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Clearwater, very cobble-----	5	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Reis-----	5	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Clearwater, depressional-----	3	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Espelie-----	3	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.13
Foxlake-----	2	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Hattie-----	1	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Huot-----	1	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
<b>I10A:</b>					
Clearwater, depressional-----	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Clearwater-----	9	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Augsburg, depressional-----	3	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Table 20a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
I10A:					
Reis-----	2	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Espelie-----	1	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.13
I11A:					
Deerwood-----	85	Poor		Not rated	
		Bottom layer	0.00		
		Thickest layer	0.00		
Rosewood-----	6	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.02
		Thickest layer	0.00	Bottom layer	0.25
Markey-----	3	Poor		Not rated	
		Bottom layer	0.00		
		Thickest layer	0.00		
Strathcona-----	2	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.25
Syrene-----	2	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.22
		Thickest layer	0.00	Thickest layer	0.22
Venlo-----	2	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.25
I12A:					
Eckvoll-----	70	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.25
Kratka-----	8	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Smiley-----	7	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Linveldt-----	5	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Reiner-----	5	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Foldahl-----	2	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.25

Table 20a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
I12A:					
Pelan-----	2	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.51
Poppleton-----	1	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.25
		Thickest layer	0.00	Thickest layer	0.25
I13A:					
Espelie-----	75	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.13
Foxlake-----	8	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Hilaire-----	7	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.25
Clearwater, depressional-----	5	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Thiefriever-----	5	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.01
I14B:					
Fairdale-----	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Fluvaquents-----	6	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.03
Hapludolls-----	5	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Hapludalfs-----	2	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Zell-----	2	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
I14D:					
Fairdale-----	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Table 20a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
<b>I14D:</b>					
Fluvaquents-----	6	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.03
Hapludolls-----	4	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Zell-----	3	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Hapludalfs-----	2	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
<b>I15A:</b>					
Flaming-----	70	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.02
		Thickest layer	0.00	Bottom layer	0.25
Garborg-----	10	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.02
		Thickest layer	0.00	Bottom layer	0.25
Hamar-----	5	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.25
		Thickest layer	0.00	Thickest layer	0.25
Ulen-----	5	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.05
		Thickest layer	0.00	Bottom layer	0.25
Poppleton-----	3	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.25
		Thickest layer	0.00	Thickest layer	0.25
Sandberg-----	3	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.07
		Thickest layer	0.00	Bottom layer	0.51
Foldahl-----	2	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.25
Radium-----	2	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.72
		Thickest layer	0.00	Bottom layer	0.79
<b>I16F:</b>					
Fluvaquents-----	55	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.03
Hapludolls-----	25	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Table 20a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
<b>I16F:</b>					
Hapludalfs-----	7	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Fairdale-----	5	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Water-----	5	Not rated		Not rated	
Bowstring-----	2	Poor		Not rated	
		Bottom layer	0.00		
		Thickest layer	0.00		
Rauville-----	1	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.01
<b>I17A:</b>					
Foldahl-----	75	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.25
Kratka-----	10	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Roliss-----	5	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Flaming-----	4	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.02
		Thickest layer	0.00	Bottom layer	0.25
Grimstad-----	2	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.05
Linveldt-----	2	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Eckvoll-----	1	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.25
Strathcona-----	1	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.25
<b>I18A:</b>					
Foldahl-----	75	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.25
Kratka-----	10	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Table 20a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
<b>I18A:</b>					
Roliss-----	5	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Flaming-----	4	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.02
		Thickest layer	0.00	Bottom layer	0.25
Grimstad-----	2	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.05
Linveltd-----	2	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Eckvoll-----	1	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.25
Strathcona-----	1	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.25
<b>I19A:</b>					
Foxhome-----	65	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.03
Kittson-----	10	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Strandquist-----	10	Fair		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.12	Thickest layer	0.68
Foldahl-----	5	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.25
Grimstad-----	5	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.05
Roliss-----	3	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Mavie-----	2	Fair		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.12	Thickest layer	0.61
<b>I20A:</b>					
Foxlake-----	75	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Table 20a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
<b>I20A:</b>					
Clearwater-----	5	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Foxlake, very cobbly	5	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Augsburg-----	3	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Clearwater, depressional-----	3	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Espelie-----	3	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.13
Hilaire-----	2	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.25
Reis-----	2	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Wheatville-----	2	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
<b>I21A:</b>					
Fram-----	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Hedman-----	12	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Strathcona-----	2	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.25
Foxhome-----	1	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.03
<b>I22A:</b>					
Glyndon-----	75	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Borup-----	10	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Table 20a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
<b>I22A:</b>					
Augsburg-----	5	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Ulen-----	5	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.05
		Thickest layer	0.00	Bottom layer	0.25
Wheatville-----	3	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Flaming-----	2	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.02
		Thickest layer	0.00	Bottom layer	0.25
<b>I23A:</b>					
Glyndon-----	75	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Borup-----	10	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Augsburg-----	5	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Ulen-----	5	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.05
		Thickest layer	0.00	Bottom layer	0.25
Wheatville-----	3	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Flaming-----	2	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.02
		Thickest layer	0.00	Bottom layer	0.25
<b>I24A:</b>					
Grimstad-----	70	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.05
Strathcona-----	12	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.25
Foldahl-----	5	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.25
Hamerly-----	5	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Table 20a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
<b>I24A:</b>					
Foxhome-----	2	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.03
Karlsruhe-----	2	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.07
		Bottom layer	0.00	Bottom layer	0.54
Mavie-----	2	Fair		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.12	Thickest layer	0.61
Ulen-----	2	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.05
		Thickest layer	0.00	Bottom layer	0.25
<b>I25A:</b>					
Hamar-----	75	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.25
		Thickest layer	0.00	Thickest layer	0.25
Garborg-----	10	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.02
		Thickest layer	0.00	Bottom layer	0.25
Rosewood-----	7	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.02
		Thickest layer	0.00	Bottom layer	0.25
Venlo-----	3	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.25
Flaming-----	2	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.02
		Thickest layer	0.00	Bottom layer	0.25
Hangaard-----	2	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.04
		Thickest layer	0.00	Bottom layer	0.51
Kratka-----	1	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
<b>I26A:</b>					
Hamerly-----	75	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Vallers-----	12	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Foxhome-----	3	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.03

Table 20a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
<b>I26A:</b>					
Grimstad-----	3	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.05
Hamerly, very cobbly	3	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Strathcona-----	3	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.25
Roliss, depressional	1	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
<b>I27A:</b>					
Hamre-----	80	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Northwood-----	5	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.13
Roliss-----	5	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Smiley-----	5	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Cathro-----	3	Poor		Not rated	
		Bottom layer	0.00		
		Thickest layer	0.00		
Kratka-----	2	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
<b>I28A:</b>					
Hangaard-----	75	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.04
		Thickest layer	0.00	Bottom layer	0.51
Hamar-----	7	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.25
		Thickest layer	0.00	Thickest layer	0.25
Syrene-----	7	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.22
		Thickest layer	0.00	Thickest layer	0.22
Karlsruhe-----	3	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.07
		Bottom layer	0.00	Bottom layer	0.54

Table 20a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
<b>I28A:</b>					
Rosewood-----	3	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.02
		Thickest layer	0.00	Bottom layer	0.25
Strandquist-----	3	Fair		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.12	Thickest layer	0.68
Deerwood-----	2	Poor		Not rated	
		Bottom layer	0.00		
		Thickest layer	0.00		
<b>I29A:</b>					
Hattie-----	75	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Clearwater-----	12	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Reis-----	6	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Hattie, very cobbly	5	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Hilaire-----	2	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.25
<b>I29D:</b>					
Hattie-----	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Clearwater-----	6	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Hattie, level-----	5	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Boyerlake-----	4	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
<b>I30A:</b>					
Hedman-----	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Fram-----	5	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Table 20a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
I30A:					
Strathcona-----	5	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.25
Haug-----	3	Poor		Not rated	
		Bottom layer	0.00		
		Thickest layer	0.00		
Strandquist-----	2	Fair		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.12	Thickest layer	0.68
I31A:					
Hedman-----	50	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Fram-----	40	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Strathcona-----	5	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.25
Haug-----	3	Poor		Not rated	
		Bottom layer	0.00		
		Thickest layer	0.00		
Strandquist-----	2	Fair		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.12	Thickest layer	0.68
I32A:					
Hilaire-----	75	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.25
Espelie-----	12	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.13
Huot-----	5	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Flaming-----	2	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.02
		Thickest layer	0.00	Bottom layer	0.25
Foxlake-----	2	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Wheatville-----	2	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Table 20a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
I32A:					
Thiefriever-----	1	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.01
Wyandotte-----	1	Fair		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.25	Thickest layer	0.10
I33A:					
Hilaire-----	75	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.25
Espelie-----	12	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.13
Huot-----	5	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Flaming-----	2	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.02
		Thickest layer	0.00	Bottom layer	0.25
Foxlake-----	2	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Wheatville-----	2	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Thiefriever-----	1	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.01
Wyandotte-----	1	Fair		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.25	Thickest layer	0.10
I34A:					
Huot-----	75	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Thiefriever-----	12	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.01
Hilaire-----	5	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.25
Flaming-----	3	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.02
		Thickest layer	0.00	Bottom layer	0.25

Table 20a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
I34A:					
Foxlake-----	3	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Ulen-----	2	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.05
		Thickest layer	0.00	Bottom layer	0.25
I35A:					
Karlsruhe-----	70	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.07
		Bottom layer	0.00	Bottom layer	0.54
Syrene-----	10	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.22
		Thickest layer	0.00	Thickest layer	0.22
Ulen-----	10	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.05
		Thickest layer	0.00	Bottom layer	0.25
Radium-----	5	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.72
		Thickest layer	0.00	Bottom layer	0.79
Rosewood-----	3	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.02
		Thickest layer	0.00	Bottom layer	0.25
Sandberg-----	2	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.07
		Thickest layer	0.00	Bottom layer	0.51
I36A:					
Kittson-----	70	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Roliss-----	12	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Hamerly-----	5	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Kratka-----	5	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Grimstad-----	3	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.05
Strandquist-----	3	Fair		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.12	Thickest layer	0.68

Table 20a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
I36A: Foxhome-----	2	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.03
I37A: Kratka, depressional	45	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Strathcona, depressional-----	45	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.25
Northwood-----	5	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.13
Kratka-----	2	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Strathcona-----	2	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.25
Roliss-----	1	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
I38A: Kratka-----	70	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Smiley-----	7	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Foldahl-----	5	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.25
Kratka, very cobbly	5	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Strathcona-----	5	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.25
Kratka, depressional	3	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Strandquist-----	3	Fair		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.12	Thickest layer	0.68

Table 20a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
I38A:					
Linveldt-----	2	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
I39A:					
Linveldt-----	65	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Kratka-----	14	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Reiner-----	10	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Smiley-----	5	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Eckvoll-----	3	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.25
Foldahl-----	2	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.25
Pelan-----	1	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.51
I40B:					
Maddock-----	85	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.05
		Thickest layer	0.00	Bottom layer	0.25
Flaming-----	5	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.02
		Thickest layer	0.00	Bottom layer	0.25
Sandberg-----	5	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.07
		Thickest layer	0.00	Bottom layer	0.51
Halverson-----	3	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.02
		Thickest layer	0.00	Thickest layer	0.02
Hamar-----	2	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.25
		Thickest layer	0.00	Thickest layer	0.25
I40F:					
Maddock-----	90	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.02
		Thickest layer	0.00	Bottom layer	0.25

Table 20a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
<b>I40F:</b>					
Flaming-----	5	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.02
		Thickest layer	0.00	Bottom layer	0.25
Sandberg-----	5	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.07
		Thickest layer	0.00	Bottom layer	0.51
<b>I41A:</b>					
Markey-----	80	Poor		Not rated	
		Bottom layer	0.00		
		Thickest layer	0.00		
Deerwood-----	12	Poor		Not rated	
		Bottom layer	0.00		
		Thickest layer	0.00		
Berner-----	2	Poor		Not rated	
		Bottom layer	0.00		
		Thickest layer	0.00		
Hamar-----	2	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.25
		Thickest layer	0.00	Thickest layer	0.25
Seelyeville-----	2	Poor		Not rated	
		Bottom layer	0.00		
		Thickest layer	0.00		
Syrene-----	2	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.22
		Thickest layer	0.00	Thickest layer	0.22
<b>I42A:</b>					
Markey, ponded-----	85	Poor		Not rated	
		Bottom layer	0.00		
		Thickest layer	0.00		
Markey-----	5	Poor		Not rated	
		Bottom layer	0.00		
		Thickest layer	0.00		
Deerwood-----	4	Poor		Not rated	
		Bottom layer	0.00		
		Thickest layer	0.00		
Seelyeville, ponded	4	Poor		Not rated	
		Bottom layer	0.00		
		Thickest layer	0.00		
Hamar-----	1	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.25
		Thickest layer	0.00	Thickest layer	0.25
Hangaard-----	1	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.04
		Thickest layer	0.00	Bottom layer	0.51

Table 20a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
I43A:					
Mavie-----	70	Fair		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.12	Thickest layer	0.61
Vallers-----	10	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Strandquist-----	7	Fair		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.12	Thickest layer	0.68
Strathcona-----	5	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.25
Strathcona, depressional-----	3	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.25
Foxhome-----	2	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.03
Karlsruhe-----	2	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.07
		Bottom layer	0.00	Bottom layer	0.54
Grimstad-----	1	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.05
I44A:					
Newfolden-----	75	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Smiley-----	12	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Boash-----	8	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Linveltdt-----	4	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Hapludolls-----	1	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
I45A:					
Northwood-----	75	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.13

Table 20a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
<b>I45A:</b>					
Hamre-----	10	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Berner-----	5	Poor		Not rated	
		Bottom layer	0.00		
		Thickest layer	0.00		
Kratka-----	5	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Strandquist-----	3	Fair		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.12	Thickest layer	0.68
Roliss-----	2	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
<b>I46A:</b>					
Pits-----	85	Not rated		Not rated	
Udipsamments-----	10	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.51
		Thickest layer	0.00	Thickest layer	0.79
Radium-----	2	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.72
		Thickest layer	0.00	Bottom layer	0.79
Maddock-----	1	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.02
		Thickest layer	0.00	Bottom layer	0.25
Marquette-----	1	Poor		Fair	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.07
Sandberg-----	1	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.07
		Thickest layer	0.00	Bottom layer	0.51
<b>I47A:</b>					
Poppleton-----	75	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.25
		Thickest layer	0.00	Thickest layer	0.25
Flaming-----	12	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.02
		Thickest layer	0.00	Bottom layer	0.25
Garborg-----	5	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.02
		Thickest layer	0.00	Bottom layer	0.25
Hamar-----	3	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.25
		Thickest layer	0.00	Thickest layer	0.25

Table 20a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
I47A:					
Radium-----	2	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.72
		Thickest layer	0.00	Bottom layer	0.79
Ulen-----	2	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.05
		Thickest layer	0.00	Bottom layer	0.25
Maddock-----	1	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.02
		Thickest layer	0.00	Bottom layer	0.25
I48A:					
Radium-----	75	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.72
		Thickest layer	0.00	Bottom layer	0.79
Sandberg-----	7	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.07
		Thickest layer	0.00	Bottom layer	0.51
Oylen-----	5	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.58
		Thickest layer	0.00	Thickest layer	0.72
Flaming-----	4	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.02
		Thickest layer	0.00	Bottom layer	0.25
Garborg-----	3	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.02
		Thickest layer	0.00	Bottom layer	0.25
Hangaard-----	3	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.04
		Thickest layer	0.00	Bottom layer	0.51
Hamar-----	2	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.25
		Thickest layer	0.00	Thickest layer	0.25
Poppleton-----	1	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.25
		Thickest layer	0.00	Thickest layer	0.25
I49A:					
Rauville-----	80	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.01
Fluvaquents-----	12	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.03
Water-----	5	Not rated		Not rated	
Lamoure-----	3	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.03

Table 20a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
<b>I50A:</b>					
Reiner-----	70	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Smiley-----	12	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Reiner, very cobbly	7	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Linveltd-----	5	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Eckvoll-----	3	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.25
Kratka-----	3	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
<b>I51A:</b>					
Reiner-----	65	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Smiley-----	9	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Reiner fine sandy loam-----	8	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Linveltd-----	7	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Kratka-----	5	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Eckvoll-----	3	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.25
Reiner, very cobbly	3	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
<b>I52A:</b>					
Reis-----	55	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Table 20a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
I52A:					
Clearwater-----	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Clearwater, very cobble-----	5	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Clearwater, depressional-----	3	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Espelie-----	3	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.13
Hattie-----	3	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Wyandotte-----	1	Fair		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.25	Thickest layer	0.10
I53A:					
Roliss-----	75	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Kratka-----	8	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Roliss, very cobble	7	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Kittson-----	5	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Roliss, depressional	3	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Smiley-----	2	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
I54A:					
Roliss, depressional	80	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Roliss-----	12	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Table 20a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
<b>I54A:</b>					
Hamre-----	5	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Kratka-----	3	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
<b>I55A:</b>					
Rosewood-----	75	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.02
		Thickest layer	0.00	Bottom layer	0.25
Ulen-----	10	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.05
		Thickest layer	0.00	Bottom layer	0.25
Hamar-----	6	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.25
		Thickest layer	0.00	Thickest layer	0.25
Rosewood, depressional-----	3	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.02
		Thickest layer	0.00	Bottom layer	0.25
Syrene-----	3	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.22
		Thickest layer	0.00	Thickest layer	0.22
Karlsruhe-----	1	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.07
		Bottom layer	0.00	Bottom layer	0.54
Strathcona-----	1	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.25
Thiefriever-----	1	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.01
<b>I56A:</b>					
Rosewood-----	50	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.02
		Thickest layer	0.00	Bottom layer	0.25
Venlo-----	40	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.25
Deerwood-----	3	Poor		Not rated	
		Bottom layer	0.00		
		Thickest layer	0.00		
Syrene-----	3	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.22
		Thickest layer	0.00	Thickest layer	0.22

Table 20a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
<b>I56A:</b>					
Ulen-----	2	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.05
		Thickest layer	0.00	Bottom layer	0.25
Strathcona-----	1	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.25
Thiefriver-----	1	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.01
<b>I57B:</b>					
Sandberg-----	50	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.07
		Thickest layer	0.00	Bottom layer	0.51
Radium-----	25	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.72
		Thickest layer	0.00	Bottom layer	0.79
Sioux-----	8	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.03
		Bottom layer	0.00	Bottom layer	0.64
Oylen-----	7	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.58
		Thickest layer	0.00	Thickest layer	0.72
Flaming-----	5	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.02
		Thickest layer	0.00	Bottom layer	0.25
Garborg-----	5	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.02
		Thickest layer	0.00	Bottom layer	0.25
<b>I58A:</b>					
Seelyeville-----	90	Poor		Not rated	
		Bottom layer	0.00		
		Thickest layer	0.00		
Cathro-----	3	Poor		Not rated	
		Bottom layer	0.00		
		Thickest layer	0.00		
Dora-----	3	Poor		Not rated	
		Bottom layer	0.00		
		Thickest layer	0.00		
Markey-----	3	Poor		Not rated	
		Bottom layer	0.00		
		Thickest layer	0.00		
Berner-----	1	Poor		Not rated	
		Bottom layer	0.00		
		Thickest layer	0.00		

Table 20a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
<b>I59A:</b>					
Smiley-----	65	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Smiley, very cobbly	10	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Kratka-----	9	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Roliss-----	5	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Reiner-----	4	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Linveltd-----	3	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Smiley, depressional	3	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Strandquist-----	1	Fair		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.12	Thickest layer	0.68
<b>I60A:</b>					
Smiley, depressional	80	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Smiley-----	10	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Hamre-----	5	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Kratka-----	5	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
<b>I61A:</b>					
Strandquist-----	70	Fair		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.12	Thickest layer	0.68
Mavie-----	8	Fair		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.12	Thickest layer	0.61

Table 20a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
I61A:					
Roliss-----	7	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Kratka-----	5	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Foxhome-----	4	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.03
Hangaard-----	3	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.04
		Thickest layer	0.00	Bottom layer	0.51
Northwood-----	3	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.13
I62A:					
Syrene-----	70	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.22
		Thickest layer	0.00	Thickest layer	0.22
Rosewood-----	11	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.02
		Thickest layer	0.00	Bottom layer	0.25
Hangaard-----	5	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.04
		Thickest layer	0.00	Bottom layer	0.51
Karlsruhe-----	4	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.07
		Bottom layer	0.00	Bottom layer	0.54
Deerwood-----	3	Poor		Not rated	
		Bottom layer	0.00		
		Thickest layer	0.00		
Hamar-----	3	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.25
		Thickest layer	0.00	Thickest layer	0.25
Strandquist-----	2	Fair		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.12	Thickest layer	0.68
Radium-----	1	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.72
		Thickest layer	0.00	Bottom layer	0.79
Wyandotte-----	1	Fair		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.25	Thickest layer	0.10

Table 20a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
<b>I63A:</b>					
Thiefriver-----	70	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.01
Espelie-----	10	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.13
Foxlake-----	7	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Huot-----	5	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Clearwater, depressional-----	3	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Rosewood-----	3	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.02
		Thickest layer	0.00	Bottom layer	0.25
Ulen-----	1	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.05
		Thickest layer	0.00	Bottom layer	0.25
Wyandotte-----	1	Fair		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.25	Thickest layer	0.10
<b>I64A:</b>					
Ulen-----	70	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.05
		Thickest layer	0.00	Bottom layer	0.25
Rosewood-----	10	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.02
		Thickest layer	0.00	Bottom layer	0.25
Flaming-----	8	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.02
		Thickest layer	0.00	Bottom layer	0.25
Karlsruhe-----	5	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.07
		Bottom layer	0.00	Bottom layer	0.54
Radium-----	3	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.72
		Thickest layer	0.00	Bottom layer	0.79
Strathcona-----	2	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.25

Table 20a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
I64A: Thiefriver-----	2	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.01
I65A: Ulen-----	70	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.05
		Thickest layer	0.00	Bottom layer	0.25
Rosewood-----	10	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.02
		Thickest layer	0.00	Bottom layer	0.25
Flaming-----	6	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.02
		Thickest layer	0.00	Bottom layer	0.25
Poppleton-----	4	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.25
		Thickest layer	0.00	Thickest layer	0.25
Karlsruhe-----	3	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.07
		Bottom layer	0.00	Bottom layer	0.54
Radium-----	3	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.72
		Thickest layer	0.00	Bottom layer	0.79
Strathcona-----	2	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.25
Thiefriver-----	2	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.01
I66A: Vallars-----	75	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Vallars, very cobbly	7	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Hamerly-----	6	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Grimstad-----	3	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.05
Mavie-----	3	Fair		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.12	Thickest layer	0.61

Table 20a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
I66A:					
Roliss, depressional	3	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Strathcona-----	3	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.25
I67A:					
Wheatville-----	70	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Augsburg-----	13	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Glyndon-----	8	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Foxlake-----	5	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Hilaire-----	2	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.25
Ulen-----	2	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.05
		Thickest layer	0.00	Bottom layer	0.25
I68A:					
Wheatville-----	70	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Augsburg-----	13	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Glyndon-----	8	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Foxlake-----	5	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Hilaire-----	2	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.25
Ulen-----	2	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.05
		Thickest layer	0.00	Bottom layer	0.25

Table 20a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
I69A:					
Wyandotte-----	65	Fair		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.25	Thickest layer	0.10
Foxlake-----	10	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Espelie-----	8	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.13
Clearwater, depressional-----	5	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Thiefriver-----	5	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.01
Karlsruhe-----	4	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.07
		Bottom layer	0.00	Bottom layer	0.54
Syrene-----	3	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.22
		Thickest layer	0.00	Thickest layer	0.22
I70A:					
Strathcona-----	70	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.25
Kratka-----	10	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Roliss-----	6	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Grimstad-----	5	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.05
Mavie-----	3	Fair		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.12	Thickest layer	0.61
Rosewood-----	3	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.02
		Thickest layer	0.00	Bottom layer	0.25
Strathcona, depressional-----	3	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.25

Table 20a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
M-W: Miscellaneous water	100	Not rated		Not rated	
W: Water-----	100	Not rated		Not rated	

Table 20b.--Construction Materials

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.00 to 0.99. The smaller the value, the greater the limitation. "Not rated" indicates that data are not available or that no rating is applicable. See text for further explanation of ratings in this table)

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>E109A:</b>							
Bowstring-----	45	Good		Poor Depth to saturated zone	0.00	Poor Depth to saturated zone Content of organic matter	0.00 0.00
Fluvaquents-----	40	Good		Poor Depth to saturated zone	0.00	Poor Depth to saturated zone Rock fragments	0.00 0.88
Hapludalfs-----	5	Fair Low content of organic matter Water erosion	0.12 0.99	Poor Slope Depth to saturated zone	0.00 0.88	Poor Slope Depth to saturated zone	0.00 0.88
Seelyeville-----	5	Poor Wind erosion Too acid	0.00 0.88	Poor Depth to saturated zone	0.00	Poor Depth to saturated zone Content of organic matter	0.00 0.00
Water-----	5	Not rated		Not rated		Not rated	
<b>B200A:</b>							
Garnes-----	70	Fair Low content of organic matter Carbonate content Water erosion	0.12 0.97 0.99	Fair Low strength Depth to saturated zone	0.22 0.88	Fair Depth to saturated zone Carbonate content	0.88 0.97
Chilgren-----	13	Fair Low content of organic matter Carbonate content Water erosion	0.12 0.97 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone Carbonate content	0.00 0.97
Eckvoll-----	5	Poor Wind erosion Too sandy Low content of organic matter Water erosion	0.00 0.06 0.12 0.99	Fair Low strength Depth to saturated zone	0.22 0.88	Fair Too sandy Depth to saturated zone	0.06 0.88
Garnes, very stony--	5	Fair Low content of organic matter Carbonate content Water erosion	0.12 0.97 0.99	Fair Low strength Depth to saturated zone	0.22 0.88	Fair Depth to saturated zone Carbonate content	0.88 0.97

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>B200A:</b>							
Grygla-----	4	Poor Wind erosion Low content of organic matter Too sandy Water erosion	0.00 0.12 0.50 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone Too sandy	0.00 0.50
Pelan-----	3	Fair Low content of organic matter Water erosion	0.12 0.99	Fair Low strength Depth to saturated zone	0.22 0.88	Fair Depth to saturated zone	0.88
<b>B201A:</b>							
Chilgren-----	75	Fair Low content of organic matter Carbonate content Water erosion	0.12 0.97 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone Carbonate content	0.00 0.97
Garnes-----	9	Fair Low content of organic matter Carbonate content Water erosion	0.12 0.97 0.99	Fair Low strength Depth to saturated zone	0.22 0.88	Fair Depth to saturated zone Carbonate content	0.88 0.97
Grygla-----	5	Poor Wind erosion Low content of organic matter Too sandy Water erosion	0.00 0.12 0.50 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone Too sandy	0.00 0.50
Grygla, depressiona	5	Poor Wind erosion Low content of organic matter Too sandy Water erosion	0.00 0.12 0.50 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone Too sandy	0.00 0.50
Hamre-----	5	Poor Wind erosion Low content of organic matter Water erosion	0.00 0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
Pelan-----	1	Fair Low content of organic matter Water erosion	0.12 0.99	Fair Low strength Depth to saturated zone	0.22 0.88	Fair Depth to saturated zone	0.88
<b>B202A:</b>							
Cathro-----	80	Poor Wind erosion Low content of organic matter Water erosion	0.00 0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>E202A:</b>							
Hamre-----	8	Poor Wind erosion Low content of organic matter Water erosion	0.00 0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
Chilgren-----	3	Fair Low content of organic matter Carbonate content Water erosion	0.12 0.97 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone Carbonate content	0.00 0.97
Northwood-----	3	Poor Wind erosion Low content of organic matter Water erosion	0.00 0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
Berner-----	2	Poor Wind erosion	0.00	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone Content of organic matter	0.00 0.00
Grygla-----	2	Poor Wind erosion Low content of organic matter Too sandy Water erosion	0.00 0.12 0.50 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone Too sandy	0.00 0.50
Seelyeville-----	2	Poor Wind erosion Too acid	0.00 0.88	Poor Depth to saturated zone	0.00	Poor Depth to saturated zone Content of organic matter	0.00 0.00
<b>E203A:</b>							
Northwood-----	75	Poor Wind erosion Low content of organic matter Water erosion	0.00 0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
Hamre-----	10	Poor Wind erosion Low content of organic matter Water erosion	0.00 0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
Grygla-----	7	Poor Wind erosion Low content of organic matter Too sandy Water erosion	0.00 0.12 0.50 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone Too sandy	0.00 0.50

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>B203A:</b>							
Berner-----	5	Poor Wind erosion	0.00	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone Content of organic matter	0.00 0.00
Chilgren-----	3	Fair Low content of organic matter Carbonate content Water erosion	0.12 0.97 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone Carbonate content	0.00 0.97
<b>B204A:</b>							
Roliss-----	75	Fair Low content of organic matter Water erosion	0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
Grygla-----	8	Poor Wind erosion Low content of organic matter Too sandy Water erosion	0.00 0.12 0.50 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone Too sandy	0.00 0.50
Chilgren-----	5	Fair Low content of organic matter Carbonate content Water erosion	0.12 0.97 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone Carbonate content	0.00 0.97
Garnes-----	5	Fair Low content of organic matter Carbonate content Water erosion	0.12 0.97 0.99	Fair Low strength Depth to saturated zone	0.22 0.88	Fair Depth to saturated zone Carbonate content	0.88 0.97
Roliss, depressional	5	Fair Low content of organic matter Water erosion	0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
Hamre-----	2	Poor Wind erosion Low content of organic matter Water erosion	0.00 0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
<b>B205A:</b>							
Berner-----	80	Poor Wind erosion	0.00	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone Content of organic matter	0.00 0.00

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>B205A:</b>							
Northwood-----	7	Poor Wind erosion Low content of organic matter Water erosion	0.00 0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
Grygla-----	5	Poor Wind erosion Low content of organic matter Too sandy Water erosion	0.00 0.12 0.50 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone Too sandy	0.00 0.50
Cathro-----	3	Poor Wind erosion Low content of organic matter Water erosion	0.00 0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
Hamre-----	3	Poor Wind erosion Low content of organic matter Water erosion	0.00 0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
Seelyeville-----	2	Poor Wind erosion Too acid	0.00 0.88	Poor Depth to saturated zone	0.00	Poor Depth to saturated zone Content of organic matter	0.00 0.00
<b>B206A:</b>							
Hamre-----	80	Poor Wind erosion Low content of organic matter Water erosion	0.00 0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
Chilgren-----	8	Fair Low content of organic matter Carbonate content Water erosion	0.12 0.97 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone Carbonate content	0.00 0.97
Northwood-----	5	Poor Wind erosion Low content of organic matter Water erosion	0.00 0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
Cathro-----	3	Poor Wind erosion Low content of organic matter Water erosion	0.00 0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>E206A:</b>							
Grygla-----	2	Poor Wind erosion Low content of organic matter Too sandy Water erosion	0.00 0.12 0.50 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone Too sandy	0.00 0.50
Roliss-----	2	Fair Low content of organic matter Water erosion	0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
<b>I1A:</b>							
Augsburg-----	75	Fair Low content of organic matter Too sandy Carbonate content	0.12 0.13 0.32	Poor Depth to saturated zone Low strength Shrink-swell	0.00 0.00 0.84	Poor Depth to saturated zone Too sandy	0.00 0.13
Borup-----	10	Fair Low content of organic matter Carbonate content	0.12 0.32	Poor Depth to saturated zone	0.00	Poor Depth to saturated zone Carbonate content	0.00 0.32
Foxlake-----	5	Poor Too clayey Low content of organic matter	0.00 0.12	Poor Depth to saturated zone Low strength Shrink-swell	0.00 0.00 0.38	Poor Depth to saturated zone Too clayey	0.00 0.00
Augsburg, depressional-----	3	Fair Low content of organic matter Carbonate content	0.12 0.16	Poor Depth to saturated zone Low strength Shrink-swell	0.00 0.00 0.84	Poor Depth to saturated zone Carbonate content	0.00 0.16
Wheatville-----	3	Fair Low content of organic matter Carbonate content Water erosion	0.12 0.32 0.90	Poor Low strength Depth to saturated zone Shrink-swell	0.00 0.06 0.80	Fair Depth to saturated zone Carbonate content	0.06 0.32
Glyndon-----	2	Fair Low content of organic matter Carbonate content	0.12 0.32	Poor Depth to saturated zone	0.00	Poor Depth to saturated zone Carbonate content	0.00 0.32
Espelie-----	1	Poor Too clayey Low content of organic matter	0.00 0.12	Poor Depth to saturated zone Low strength Shrink-swell	0.00 0.00 0.57	Poor Depth to saturated zone Too clayey	0.00 0.00
Hattie-----	1	Poor Too clayey Low content of organic matter	0.00 0.12	Poor Low strength Shrink-swell Depth to saturated zone	0.00 0.12 0.65	Poor Too clayey Depth to saturated zone	0.00 0.65

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I2A:							
Augsburg-----	75	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Too sandy	0.13	Low strength	0.00	Too sandy	0.13
		Carbonate content	0.32	Shrink-swell	0.84		
Borup-----	10	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Carbonate content	0.32			Carbonate content	0.32
Foxlake-----	5	Poor		Poor		Poor	
		Too clayey	0.00	Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Low content of organic matter	0.12	Low strength	0.00	Too clayey	0.00
				Shrink-swell	0.38		
Augsburg, depressional-----	3	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Carbonate content	0.16	Low strength	0.00	Carbonate content	0.16
				Shrink-swell	0.84		
Wheatville-----	3	Fair		Poor		Fair	
		Low content of organic matter	0.12	Low strength	0.00	Depth to saturated zone	0.06
		Carbonate content	0.32	Depth to saturated zone	0.06	Carbonate content	0.32
		Water erosion	0.90	Shrink-swell	0.80		
Glyndon-----	2	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Carbonate content	0.32			Carbonate content	0.32
Espelie-----	1	Poor		Poor		Poor	
		Too clayey	0.00	Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Low content of organic matter	0.12	Low strength	0.00	Too clayey	0.00
				Shrink-swell	0.57		
Hattie-----	1	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Too clayey	0.00
		Low content of organic matter	0.12	Shrink-swell	0.12	Depth to saturated zone	0.65
				Depth to saturated zone	0.65		
I3A:							
Berner-----	80	Not rated		Poor		Not rated	
				Depth to saturated zone	0.00		
				Low strength	0.22		
Northwood-----	7	Poor		Poor		Poor	
		Wind erosion	0.00	Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Low content of organic matter	0.12	Low strength	0.22		
		Water erosion	0.99				

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>I3A:</b>							
Kratka-----	5	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Water erosion	0.99	Low strength	0.22		
Hamre-----	3	Poor		Poor		Poor	
		Wind erosion	0.00	Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Low content of organic matter	0.12	Low strength	0.22		
		Water erosion	0.99				
Strathcona-----	3	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Carbonate content	0.92	Low strength	0.22		
		Water erosion	0.99				
Seelyeville-----	2	Not rated		Poor		Not rated	
				Depth to saturated zone	0.00		
<b>I4A:</b>							
Berner-----	30	Not rated		Poor		Not rated	
				Depth to saturated zone	0.00		
				Low strength	0.22		
Rosewood, depressional-----	30	Poor		Poor		Poor	
		Too sandy	0.00	Depth to saturated zone	0.00	Too sandy	0.00
		Low content of organic matter	0.12			Depth to saturated zone	0.00
		Carbonate content	0.68			Rock fragments	0.88
Strathcona, depressional-----	30	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Carbonate content	0.92	Low strength	0.22		
		Water erosion	0.99				
Rosewood-----	4	Poor		Poor		Poor	
		Too sandy	0.00	Depth to saturated zone	0.00	Too sandy	0.00
		Low content of organic matter	0.12			Depth to saturated zone	0.00
		Carbonate content	0.68			Rock fragments	0.88
Deerwood-----	2	Poor		Poor		Poor	
		Too sandy	0.00	Depth to saturated zone	0.00	Too sandy	0.00
		Wind erosion	0.00			Depth to saturated zone	0.00
		Low content of organic matter	0.12			Rock fragments	0.28

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I4A:							
Mavie-----	2	Poor		Poor		Poor	
		Too sandy	0.00	Depth to	0.00	Too sandy	0.00
		Low content of organic matter	0.12	saturated zone		Depth to	0.00
		Carbonate content	0.68	Low strength	0.22	saturated zone	0.00
		Water erosion	0.99			Rock fragments	0.00
						Carbonate content	0.97
Strathcona-----	2	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to	0.00	Depth to	0.00
		Carbonate content	0.92	saturated zone		saturated zone	
		Water erosion	0.99	Low strength	0.22		
I5A:							
Borup-----	75	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to	0.00	Depth to	0.00
		Carbonate content	0.32	saturated zone		saturated zone	
						Carbonate content	0.32
Glyndon-----	9	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to	0.00	Depth to	0.00
		Carbonate content	0.32	saturated zone		saturated zone	
						Carbonate content	0.32
Rosewood-----	8	Poor		Poor		Poor	
		Too sandy	0.00	Depth to	0.00	Too sandy	0.00
		Low content of organic matter	0.12	saturated zone		Depth to	0.00
		Carbonate content	0.68			saturated zone	
						Rock fragments	0.88
Augsburg-----	5	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to	0.00	Depth to	0.00
		Too sandy	0.13	saturated zone		saturated zone	
		Carbonate content	0.32	Low strength	0.00	Too sandy	0.13
				Shrink-swell	0.84		
Augsburg, depressional-----	3	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to	0.00	Depth to	0.00
		Carbonate content	0.16	saturated zone		saturated zone	
				Low strength	0.00	Carbonate content	0.16
				Shrink-swell	0.84		
I6A:							
Borup-----	75	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to	0.00	Depth to	0.00
		Carbonate content	0.32	saturated zone		saturated zone	
						Carbonate content	0.32
Glyndon-----	9	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to	0.00	Depth to	0.00
		Carbonate content	0.32	saturated zone		saturated zone	
						Carbonate content	0.32
Rosewood-----	8	Poor		Poor		Poor	
		Too sandy	0.00	Depth to	0.00	Too sandy	0.00
		Low content of organic matter	0.12	saturated zone		Depth to	0.00
		Carbonate content	0.68			saturated zone	
						Rock fragments	0.88

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I6A: Augsburg-----	5	Fair Low content of organic matter Too sandy Carbonate content	0.12 0.13 0.32	Poor Depth to saturated zone Low strength Shrink-swell	0.00 0.00 0.84	Poor Depth to saturated zone Too sandy	0.00 0.13
Augsburg, depressional-----	3	Fair Low content of organic matter Carbonate content	0.12 0.16	Poor Depth to saturated zone Low strength Shrink-swell	0.00 0.00 0.84	Poor Depth to saturated zone Carbonate content	0.00 0.16
I7A: Bowstring-----	45	Not rated		Poor Depth to saturated zone	0.00	Not rated	
Fluvaquents-----	45	Good		Poor Depth to saturated zone	0.00	Poor Depth to saturated zone Rock fragments	0.00 0.88
Hapludolls-----	5	Fair Low content of organic matter	0.12	Good		Fair Slope	0.37
Water-----	5	Not rated		Not rated		Not rated	
I8A: Cathro-----	80	Poor Wind erosion Low content of organic matter Water erosion	0.00 0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
Hamre-----	8	Poor Wind erosion Low content of organic matter Water erosion	0.00 0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
Northwood-----	3	Poor Wind erosion Low content of organic matter Water erosion	0.00 0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
Roliss-----	3	Fair Low content of organic matter Water erosion	0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
Berner-----	2	Not rated		Poor Depth to saturated zone Low strength	0.00 0.22	Not rated	

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I8A: Kratka-----	2	Fair Low content of organic matter Water erosion	0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
Seelyeville-----	2	Not rated		Poor Depth to saturated zone	0.00	Not rated	
I9A: Clearwater-----	80	Poor Too clayey Low content of organic matter	0.00 0.12	Poor Depth to saturated zone Low strength Shrink-swell	0.00 0.00 0.12	Poor Depth to saturated zone Too clayey	0.00 0.00
Clearwater, very cobble-----	5	Poor Too clayey Low content of organic matter	0.00 0.12	Poor Depth to saturated zone Low strength Shrink-swell	0.00 0.00 0.12	Poor Depth to saturated zone Too clayey	0.00 0.00
Reis-----	5	Poor Too clayey Low content of organic matter Carbonate content	0.00 0.12 0.68	Poor Depth to saturated zone Low strength Shrink-swell	0.00 0.00 0.12	Poor Too clayey Depth to saturated zone Carbonate content	0.00 0.00 0.68
Clearwater, depressional-----	3	Poor Too clayey Low content of organic matter	0.00 0.12	Poor Depth to saturated zone Low strength Shrink-swell	0.00 0.00 0.12	Poor Depth to saturated zone Too clayey	0.00 0.00
Espelie-----	3	Poor Too clayey Low content of organic matter	0.00 0.12	Poor Depth to saturated zone Low strength Shrink-swell	0.00 0.00 0.57	Poor Depth to saturated zone Too clayey	0.00 0.00
Foxlake-----	2	Poor Too clayey Low content of organic matter	0.00 0.12	Poor Depth to saturated zone Low strength Shrink-swell	0.00 0.00 0.38	Poor Depth to saturated zone Too clayey	0.00 0.00
Hattie-----	1	Poor Too clayey Low content of organic matter	0.00 0.12	Poor Low strength Shrink-swell Depth to saturated zone	0.00 0.12 0.65	Poor Too clayey Depth to saturated zone	0.00 0.65
Huot-----	1	Fair Low content of organic matter Carbonate content	0.12 0.68	Poor Low strength Shrink-swell Depth to saturated zone	0.00 0.86 0.88	Fair Depth to saturated zone Rock fragments	0.88 0.97

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I10A: Clearwater, depressional-----	85	Poor Too clayey Low content of organic matter	0.00 0.12	Poor Depth to saturated zone Low strength Shrink-swell	0.00 0.00 0.12	Poor Depth to saturated zone Too clayey	0.00 0.00 0.00
Clearwater-----	9	Poor Too clayey Low content of organic matter	0.00 0.12	Poor Depth to saturated zone Low strength Shrink-swell	0.00 0.00 0.12	Poor Depth to saturated zone Too clayey	0.00 0.00 0.00
Augsburg, depressional-----	3	Fair Low content of organic matter Carbonate content	0.12 0.16	Poor Depth to saturated zone Low strength Shrink-swell	0.00 0.00 0.84	Poor Depth to saturated zone Carbonate content	0.00 0.16
Reis-----	2	Poor Too clayey Low content of organic matter Carbonate content	0.00 0.12 0.68	Poor Depth to saturated zone Low strength Shrink-swell	0.00 0.00 0.12	Poor Too clayey Depth to saturated zone Carbonate content	0.00 0.00 0.68
Espelie-----	1	Poor Too clayey Low content of organic matter	0.00 0.12	Poor Depth to saturated zone Low strength Shrink-swell	0.00 0.00 0.57	Poor Depth to saturated zone Too clayey	0.00 0.00
I11A: Deerwood-----	85	Poor Too sandy Wind erosion Low contnt of organic matter	0.00 0.00 0.12	Poor Depth to saturated zone	0.00	Poor Too sandy Depth to saturated zone Rock fragments	0.00 0.00 0.28
Rosewood-----	6	Poor Too sandy Low content of organic matter Carbonate content	0.00 0.12 0.68	Poor Depth to saturated zone	0.00	Poor Too sandy Depth to saturated zone Rock fragments	0.00 0.00 0.88
Markey-----	3	Not rated		Poor Depth to saturated zone	0.00	Not rated	
Strathcona-----	2	Fair Low content of organic matter Carbonate content Water erosion	0.12 0.92 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I11A: Syrene-----	2	Fair Low content of organic matter Droughty Too sandy Carbonate content	0.12 0.17 0.22 0.68	Poor Depth to saturated zone	0.00	Poor Depth to saturated zone Rock fragments Too sandy Hard to reclaim	0.00 0.00 0.22 0.68
Venlo-----	2	Poor Too sandy Low content of organic matter Droughty	0.00 0.12 0.93	Poor Depth to saturated zone	0.00	Poor Too sandy Depth to saturated zone	0.00 0.00
I12A: Eckvoll-----	70	Poor Too sandy Wind erosion Low content of organic matter Water erosion	0.00 0.00 0.12 0.99	Fair Low strength Depth to saturated zone	0.22 0.88	Poor Too sandy Depth to saturated zone	0.00 0.88
Kratka-----	8	Fair Low content of organic matter Water erosion	0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
Smiley-----	7	Fair Low content of organic matter Carbonate content Water erosion	0.12 0.92 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone Carbonate content	0.00 0.92
Linveldt-----	5	Poor Too sandy Low content of organic matter Carbonate content Water erosion	0.00 0.12 0.97 0.99	Fair Low strength Depth to saturated zone	0.22 0.88	Poor Too sandy Rock fragments Depth to saturated zone	0.00 0.50 0.88
Reiner-----	5	Fair Low content of organic matter Carbonate content Water erosion	0.12 0.97 0.99	Fair Low strength Depth to saturated zone	0.22 0.88	Fair Depth to saturated zone Carbonate content	0.88 0.97
Foldahl-----	2	Poor Too sandy Wind erosion Low content of organic matter Water erosion	0.00 0.00 0.12 0.99	Fair Low strength Depth to saturated zone	0.22 0.88	Poor Too sandy Depth to saturated zone	0.00 0.88
Pelan-----	2	Fair Low content of organic matter Water erosion	0.12 0.99	Fair Low strength Depth to saturated zone	0.22 0.88	Fair Depth to saturated zone	0.88

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I12A: Poppleton-----	1	Poor Too sandy Wind erosion Low content of organic matter Droughty	0.00 0.00 0.12 0.81	Fair Depth to saturated zone	0.88	Poor Too sandy Depth to saturated zone	0.00 0.88
I13A: Espelie-----	75	Poor Too clayey Low content of organic matter	0.00 0.12	Poor Depth to saturated zone Low strength Shrink-swell	0.00 0.00 0.57	Poor Depth to saturated zone Too clayey	0.00 0.00
Foxlake-----	8	Poor Too clayey Low content of organic matter	0.00 0.12	Poor Depth to saturated zone Low strength Shrink-swell	0.00 0.00 0.38	Poor Depth to saturated zone Too clayey	0.00 0.00
Hilaire-----	7	Poor Too sandy Wind erosion Low content of organic matter	0.00 0.00 0.12	Poor Low strength Shrink-swell Depth to saturated zone	0.00 0.86 0.88	Poor Too sandy Depth to saturated zone Rock fragments	0.00 0.88 0.97
Clearwater, depressional-----	5	Poor Too clayey Low content of organic matter	0.00 0.12	Poor Depth to saturated zone Low strength Shrink-swell	0.00 0.00 0.12	Poor Depth to saturated zone Too clayey	0.00 0.00
Thiefriever-----	5	Fair Low content of organic matter Carbonate content	0.12 0.68	Poor Depth to saturated zone Low strength Shrink-swell	0.00 0.00 0.82	Poor Depth to saturated zone	0.00
I14B: Fairdale-----	85	Good		Fair Depth to saturated zone Shrink-swell	0.88 0.96	Fair Depth to saturated zone	0.88
Fluvaquents-----	6	Good		Poor Depth to saturated zone	0.00	Poor Depth to saturated zone Rock fragments	0.00 0.88
Hapludolls-----	5	Fair Low content of organic matter	0.12	Good		Fair Slope	0.37
Hapludalfs-----	2	Fair Low content of organic matter Water erosion	0.12 0.99	Poor Slope Depth to saturated zone	0.00 0.88	Poor Slope Depth to saturated zone	0.00 0.88

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I14B: Zell-----	2	Fair Low content of organic matter Carbonate content Water erosion	0.12 0.68 0.90	Good		Fair Slope Carbonate content	0.16 0.68
I14D: Fairdale-----	85	Good		Fair Depth to saturated zone Shrink-swell	0.88 0.96	Fair Slope Depth to saturated zone	0.63 0.88
Fluvaquents-----	6	Good		Poor Depth to saturated zone	0.00	Poor Depth to saturated zone Rock fragments	0.00 0.88
Hapludolls-----	4	Fair Low content of organic matter	0.12	Good		Fair Slope	0.37
Zell-----	3	Fair Low content of organic matter Carbonate content Water erosion	0.12 0.68 0.90	Good		Fair Slope Carbonate content	0.16 0.68
Hapludalfs-----	2	Fair Low content of organic matter Water erosion	0.12 0.99	Poor Slope Depth to saturated zone	0.00 0.88	Poor Slope Depth to saturated zone	0.00 0.88
I15A: Flaming-----	70	Poor Too sandy Wind erosion Low content of organic matter Droughty	0.00 0.00 0.12 0.75	Fair Depth to saturated zone	0.88	Poor Too sandy Depth to saturated zone	0.00 0.88
Garborg-----	10	Poor Wind erosion Too sandy	0.00 0.45	Fair Depth to saturated zone	0.12	Fair Depth to saturated zone Too sandy	0.12 0.45
Hamar-----	5	Poor Too sandy Wind erosion Low content of organic matter Droughty	0.00 0.00 0.12 0.83	Poor Depth to saturated zone	0.00	Poor Too sandy Depth to saturated zone	0.00 0.00
Ulen-----	5	Fair Too sandy Low content of organic matter Carbonate content Droughty	0.16 0.50 0.68 0.99	Fair Depth to saturated zone	0.50	Fair Too sandy Depth to saturated zone Carbonate content	0.16 0.50 0.68

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I15A: Poppleton-----	3	Poor Too sandy Wind erosion Low content of organic matter Droughty	0.00 0.00 0.12 0.81	Fair Depth to saturated zone	0.88	Poor Too sandy Depth to saturated zone	0.00 0.88
Sandberg-----	3	Poor Wind erosion Low content of organic matter Droughty Too sandy	0.00 0.12 0.14 0.47	Good		Fair Rock fragments Too sandy Hard to reclaim	0.12 0.47 0.92
Foldahl-----	2	Poor Too sandy Wind erosion Low content of organic matter Water erosion	0.00 0.00 0.12 0.99	Fair Low strength Depth to saturated zone	0.22 0.88	Poor Too sandy Depth to saturated zone	0.00 0.88
Radium-----	2	Poor Too sandy Wind erosion Low content of organic matter Droughty	0.00 0.00 0.12 0.82	Good		Poor Too sandy Rock fragments	0.00 0.50
I16F: Fluvaquents-----	55	Good		Poor Depth to saturated zone	0.00	Poor Depth to saturated zone Rock fragments	0.00 0.88
Hapludolls-----	25	Fair Low content of organic matter	0.12	Good		Fair Slope	0.37
Hapludalfs-----	7	Fair Low content of organic matter Water erosion	0.12 0.99	Poor Slope Depth to saturated zone	0.00 0.88	Poor Slope Depth to saturated zone	0.00 0.88
Fairdale-----	5	Good		Fair Depth to saturated zone Shrink-swell	0.88 0.96	Fair Slope Depth to saturated zone	0.63 0.88
Water-----	5	Not rated		Not rated		Not rated	
Bowstring-----	2	Not rated		Poor Depth to saturated zone	0.00	Not rated	
Rauville-----	1	Good		Poor Depth to saturated zone Low strength Shrink-swell	0.00 0.00 0.98	Poor Depth to saturated zone	0.00

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I17A: Foldahl-----	75	Poor Too sandy Low content of organic matter Water erosion	0.00 0.12 0.99	Fair Low strength Depth to saturated zone	0.22 0.88	Poor Too sandy Depth to saturated zone	0.00 0.88
Kratka-----	10	Fair Low content of organic matter Water erosion	0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
Roliss-----	5	Fair Low content of organic matter Water erosion	0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
Flaming-----	4	Poor Too sandy Wind erosion Low content of organic matter Droughty	0.00 0.00 0.12 0.75	Fair Depth to saturated zone	0.88	Poor Too sandy Depth to saturated zone	0.00 0.88
Grimstad-----	2	Fair Low content of organic matter Too sandy Carbonate content Water erosion	0.12 0.16 0.92 0.99	Fair Depth to saturated zone Low strength	0.12 0.22	Fair Depth to saturated zone Too sandy Carbonate content	0.12 0.16 0.92
Linveldt-----	2	Poor Too sandy Low content of organic matter Carbonate content Water erosion	0.00 0.12 0.97 0.99	Fair Low strength Depth to saturated zone	0.22 0.88	Poor Too sandy Rock fragments Depth to saturated zone	0.00 0.50 0.88
Eckvoll-----	1	Poor Too sandy Wind erosion Low content of organic matter Water erosion	0.00 0.00 0.12 0.99	Fair Low strength Depth to saturated zone	0.22 0.88	Poor Too sandy Depth to saturated zone	0.00 0.88
Strathcona-----	1	Fair Low content of organic matter Carbonate content Water erosion	0.12 0.92 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
I18A: Foldahl-----	75	Poor Too sandy Wind erosion Low content of organic matter Water erosion	0.00 0.00 0.12 0.99	Fair Low strength Depth to saturated zone	0.22 0.88	Poor Too sandy Depth to saturated zone	0.00 0.88

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I18A:							
Kratka-----	10	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Water erosion	0.99	Low strength	0.22		
Roliss-----	5	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Water erosion	0.99	Low strength	0.22		
Flaming-----	4	Poor		Fair		Poor	
		Too sandy	0.00	Depth to saturated zone	0.88	Too sandy	0.00
		Wind erosion	0.00			Depth to saturated zone	0.88
		Low content of organic matter	0.12				
		Droughty	0.75				
Grimstad-----	2	Fair		Fair		Fair	
		Low content of organic matter	0.12	Depth to saturated zone	0.12	Depth to saturated zone	0.12
		Too sandy	0.16	Low strength	0.22	Too sandy	0.16
		Carbonate content	0.92			Carbonate content	0.92
		Water erosion	0.99				
Linveldt-----	2	Poor		Fair		Poor	
		Too sandy	0.00	Low strength	0.22	Too sandy	0.00
		Low content of organic matter	0.12	Depth to saturated zone	0.88	Rock fragments	0.50
		Carbonate content	0.97			Depth to saturated zone	0.88
		Water erosion	0.99				
Eckvoll-----	1	Poor		Fair		Poor	
		Too sandy	0.00	Low strength	0.22	Too sandy	0.00
		Wind erosion	0.00	Depth to saturated zone	0.88	Depth to saturated zone	0.88
		Low content of organic matter	0.12				
		Water erosion	0.99				
Strathcona-----	1	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Carbonate content	0.92	Low strength	0.22		
		Water erosion	0.99				
I19A:							
Foxhome-----	65	Fair		Fair		Fair	
		Low content of organic matter	0.12	Low strength	0.22	Depth to saturated zone	0.88
		Water erosion	0.99	Depth to saturated zone	0.88		
Kittson-----	10	Fair		Fair		Fair	
		Low content of organic matter	0.12	Low strength	0.22	Depth to saturated zone	0.88
		Carbonate content	0.92	Depth to saturated zone	0.88	Carbonate content	0.92
		Water erosion	0.99				

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I19A:							
Strandquist-----	10	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Water erosion	0.99	Low strength	0.22		
Foldahl-----	5	Poor		Fair		Poor	
		Too sandy	0.00	Low strength	0.22	Too sandy	0.00
		Low content of organic matter	0.12	Depth to saturated zone	0.88	Depth to saturated zone	0.88
		Water erosion	0.99				
Grimstad-----	5	Fair		Fair		Fair	
		Low content of organic matter	0.12	Depth to saturated zone	0.12	Depth to saturated zone	0.12
		Too sandy	0.16	Low strength	0.22	Too sandy	0.16
		Carbonate content	0.92			Carbonate content	0.92
		Water erosion	0.99				
Roliss-----	3	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Water erosion	0.99	Low strength	0.22		
Mavie-----	2	Poor		Poor		Poor	
		Too sandy	0.00	Depth to saturated zone	0.00	Too sandy	0.00
		Low content of organic matter	0.12	Low strength	0.22	Depth to saturated zone	0.00
		Carbonate content	0.68			Rock fragments	0.00
		Water erosion	0.99			Carbonate content	0.97
I20A:							
Foxlake-----	75	Poor		Poor		Poor	
		Too clayey	0.00	Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Low content of organic matter	0.12	Low strength	0.00	Too clayey	0.00
				Shrink-swell	0.38		
Clearwater-----	5	Poor		Poor		Poor	
		Too clayey	0.00	Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Low content of organic matter	0.12	Low strength	0.00	Too clayey	0.00
				Shrink-swell	0.12		
Foxlake, very cobbly	5	Poor		Poor		Poor	
		Too clayey	0.00	Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Low content of organic matter	0.12	Low strength	0.00	Too clayey	0.00
				Shrink-swell	0.38		
Augsburg-----	3	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Too sandy	0.13	Low strength	0.00	Too sandy	0.13
		Carbonate content	0.32	Shrink-swell	0.84		

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I20A: Clearwater, depressional-----	3	Poor Too clayey Low content of organic matter	0.00 0.12	Poor Depth to saturated zone Low strength Shrink-swell	0.00 0.00 0.12	Poor Depth to saturated zone Too clayey	0.00 0.00
Espelie-----	3	Poor Too clayey Low content of organic matter	0.00 0.12	Poor Depth to saturated zone Low strength Shrink-swell	0.00 0.00 0.57	Poor Depth to saturated zone Too clayey	0.00 0.00
Hilaire-----	2	Poor Too sandy Wind erosion Low content of organic matter	0.00 0.00 0.12	Poor Low strength Shrink-swell Depth to saturated zone	0.00 0.86 0.88	Poor Too sandy Depth to saturated zone Rock fragments	0.00 0.88 0.97
Reis-----	2	Poor Too clayey Low content of organic matter Carbonate content	0.00 0.12 0.68	Poor Depth to saturated zone Low strength Shrink-swell	0.00 0.00 0.12	Poor Too clayey Depth to saturated zone Carbonate content	0.00 0.00 0.68
Wheatville-----	2	Fair Low content of organic matter Carbonate content Water erosion	0.12 0.32 0.90	Poor Low strength Depth to saturated zone Shrink-swell	0.00 0.06 0.80	Fair Depth to saturated zone Carbonate content	0.06 0.32
I21A: Fram-----	85	Fair Low content of organic matter Carbonate content Water erosion	0.50 0.68 0.99	Fair Depth to saturated zone	0.88	Fair Carbonate content Depth to saturated zone	0.68 0.88
Hedman-----	12	Fair Low content of organic matter Carbonate content Water erosion	0.12 0.68 0.99	Poor Depth to saturated zone	0.00	Poor Depth to saturated zone	0.00
Strathcona-----	2	Fair Low content of organic matter Carbonate content Water erosion	0.12 0.92 0.99	Poor Depth to saturated zone	0.00	Poor Depth to saturated zone	0.00
Foxhome-----	1	Fair Low content of organic matter Water erosion	0.12 0.99	Fair Depth to saturated zone	0.88	Fair Depth to saturated zone	0.88

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I22A:							
Glyndon-----	75	Fair Low content of organic matter Carbonate content	0.12 0.32	Poor Depth to saturated zone	0.00	Poor Depth to saturated zone Carbonate content	0.00 0.32
Borup-----	10	Fair Low content of organic matter Carbonate content	0.12 0.32	Poor Depth to saturated zone	0.00	Poor Depth to saturated zone Carbonate content	0.00 0.32
Augsburg-----	5	Fair Low content of organic matter Carbonate content	0.12 0.32	Poor Depth to saturated zone Low strength Shrink-swell	0.00 0.00 0.84	Poor Depth to saturated zone	0.00
Ulen-----	5	Fair Too sandy Low content of organic matter Carbonate content Droughty	0.16 0.50 0.68 0.99	Fair Depth to saturated zone	0.50	Fair Too sandy Depth to saturated zone Carbonate content	0.16 0.50 0.68
Wheatville-----	3	Fair Low content of organic matter Carbonate content Water erosion	0.12 0.32 0.90	Poor Low strength Depth to saturated zone Shrink-swell	0.00 0.06 0.80	Fair Depth to saturated zone Carbonate content	0.06 0.32
Flaming-----	2	Poor Too sandy Wind erosion Low content of organic matter Droughty	0.00 0.00 0.12 0.75	Fair Depth to saturated zone	0.88	Poor Too sandy Depth to saturated zone	0.00 0.88
I23A:							
Glyndon-----	75	Fair Low content of organic matter Carbonate content	0.12 0.32	Poor Depth to saturated zone	0.00	Poor Depth to saturated zone Carbonate content	0.00 0.32
Borup-----	10	Fair Low content of organic matter Carbonate content	0.12 0.32	Poor Depth to saturated zone	0.00	Poor Depth to saturated zone Carbonate content	0.00 0.32
Augsburg-----	5	Fair Low content of organic matter Too sandy Carbonate content	0.12 0.13 0.32	Poor Depth to saturated zone Low strength Shrink-swell	0.00 0.00 0.84	Poor Depth to saturated zone Too sandy	0.00 0.13

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I23A:							
Ulen-----	5	Poor Wind erosion Too sandy Low content of organic matter Carbonate content Droughty	 0.00 0.16 0.50 0.68 0.93	Fair Depth to saturated zone	 0.50	Fair Too sandy Depth to saturated zone Carbonate content	 0.16 0.50 0.68
Wheatville-----	3	Fair Low content of organic matter Carbonate content Water erosion	 0.12 0.32 0.90	Poor Low strength Depth to saturated zone Shrink-swell	 0.00 0.06 0.80	Fair Depth to saturated zone Carbonate content	 0.06 0.32
Flaming-----	2	Poor Too sandy Wind erosion Low content of organic matter Droughty	 0.00 0.00 0.12 0.75	Fair Depth to saturated zone	 0.88	Poor Too sandy Depth to saturated zone	 0.00 0.88
I24A:							
Grimstad-----	70	Fair Low content of organic matter Too sandy Carbonate content Water erosion	 0.12 0.16 0.92 0.99	Fair Depth to saturated zone Low strength	 0.12 0.22	Fair Depth to saturated zone Too sandy Carbonate content	 0.12 0.16 0.92
Strathcona-----	12	Fair Low content of organic matter Carbonate content Water erosion	 0.12 0.92 0.99	Poor Depth to saturated zone Low strength	 0.00 0.22	Poor Depth to saturated zone	 0.00
Foldahl-----	5	Poor Too sandy Low content of organic matter Water erosion	 0.00 0.12 0.99	Fair Low strength Depth to saturated zone	 0.22 0.88	Poor Too sandy Depth to saturated zone	 0.00 0.88
Hamerly-----	5	Fair Low content of organic matter Carbonate content Water erosion	 0.12 0.68 0.99	Fair Depth to saturated zone Low strength	 0.06 0.22	Fair Depth to saturated zone Carbonate content	 0.06 0.68
Foxhome-----	2	Fair Low content of organic matter Water erosion	 0.12 0.99	Fair Low strength Depth to saturated zone	 0.22 0.88	Fair Depth to saturated zone	 0.88
Karlsruhe-----	2	Fair Low content of organic matter Carbonate content Droughty	 0.12 0.68 0.90	Fair Depth to saturated zone	 0.50	Fair Depth to saturated zone Hard to reclaim	 0.50 0.68

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I24A: Mavie-----	2	Poor Too sandy Low content of organic matter Carbonate content Water erosion	0.00 0.12 0.68 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Too sandy Depth to saturated zone Rock fragments Carbonate content	0.00 0.00 0.00 0.97
Ulen-----	2	Fair Too sandy Low content of organic matter Carbonate content Droughty	0.16 0.50 0.68 0.99	Fair Depth to saturated zone	0.50	Fair Too sandy Depth to saturated zone Carbonate content	0.16 0.50 0.68
I25A: Hamar-----	75	Poor Too sandy Wind erosion Low content of organic matter Droughty	0.00 0.00 0.12 0.83	Poor Depth to saturated zone	0.00	Poor Too sandy Depth to saturated zone	0.00 0.00
Garborg-----	10	Poor Wind erosion Too sandy	0.00 0.45	Fair Depth to saturated zone	0.12	Fair Depth to saturated zone Too sandy	0.12 0.45
Rosewood-----	7	Poor Too sandy Low content of organic matter Carbonate content	0.00 0.12 0.68	Poor Depth to saturated zone	0.00	Poor Too sandy Depth to saturated zone Rock fragments	0.00 0.00 0.88
Venlo-----	3	Poor Too sandy Low content of organic matter Droughty	0.00 0.12 0.93	Poor Depth to saturated zone	0.00	Poor Too sandy Depth to saturated zone	0.00 0.00
Flaming-----	2	Poor Too sandy Wind erosion Low content of organic matter Droughty	0.00 0.00 0.12 0.75	Fair Depth to saturated zone	0.88	Poor Too sandy Depth to saturated zone	0.00 0.88
Hangaard-----	2	Poor Too sandy Droughty Low content of organic matter	0.00 0.09 0.12	Poor Depth to saturated zone	0.00	Poor Too sandy Depth to saturated zone Rock fragments Hard to reclaim	0.00 0.00 0.03 0.98
Kratka-----	1	Fair Low content of organic matter Water erosion	0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>I26A:</b>							
Hamerly-----	75	Fair		Fair		Fair	
		Low content of organic matter	0.12	Depth to saturated zone	0.06	Depth to saturated zone	0.06
		Carbonate content	0.68	Low strength	0.22	Carbonate content	0.68
		Water erosion	0.99				
Vallers-----	12	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Carbonate content	0.68	Low strength	0.22		
		Water erosion	0.99				
Foxhome-----	3	Fair		Fair		Fair	
		Low content of organic matter	0.12	Low strength	0.22	Depth to saturated zone	0.88
		Water erosion	0.99	Depth to saturated zone	0.88		
Grimstad-----	3	Fair		Fair		Fair	
		Low content of organic matter	0.12	Depth to saturated zone	0.12	Depth to saturated zone	0.12
		Too sandy	0.16	Low strength	0.22	Too sandy	0.16
		Carbonate content	0.92			Carbonate content	0.92
		Water erosion	0.99				
Hamerly, very cobbly	3	Fair		Fair		Fair	
		Low content of organic matter	0.12	Depth to saturated zone	0.06	Depth to saturated zone	0.06
		Carbonate content	0.68	Low strength	0.22	Carbonate content	0.68
		Water erosion	0.99				
Strathcona-----	3	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Carbonate content	0.92	Low strength	0.22		
		Water erosion	0.99				
Roliss, depressional	1	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Water erosion	0.99	Low strength	0.22		
<b>I27A:</b>							
Hamre-----	80	Poor		Poor		Poor	
		Wind erosion	0.00	Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Low content of organic matter	0.12	Low strength	0.22		
		Water erosion	0.99				
Northwood-----	5	Poor		Poor		Poor	
		Wind erosion	0.00	Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Low content of organic matter	0.12	Low strength	0.22		
		Water erosion	0.99				
Roliss-----	5	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Water erosion	0.99	Low strength	0.22		

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I27A: Smiley-----	5	Fair Low content of organic matter Carbonate content Water erosion	0.12 0.92 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone Carbonate content	0.00 0.92
Cathro-----	3	Poor Wind erosion Low content of organic matter Water erosion	0.00 0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
Kratka-----	2	Fair Low content of organic matter Water erosion	0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
I28A: Hangaard-----	75	Poor Too sandy Droughty Low content of organic matter	0.00 0.09 0.12	Poor Depth to saturated zone	0.00	Poor Too sandy Depth to saturated zone Rock fragments Hard to reclaim	0.00 0.00 0.03 0.98
Hamar-----	7	Poor Too sandy Wind erosion Low content of organic matter Droughty	0.00 0.00 0.12 0.83	Poor Depth to saturated zone	0.00	Poor Too sandy Depth to saturated zone	0.00 0.00
Syrene-----	7	Fair Low content of organic matter Droughty Too sandy Carbonate content	0.12 0.17 0.22 0.68	Poor Depth to saturated zone	0.00	Poor Depth to saturated zone Rock fragments Too sandy Hard to reclaim	0.00 0.00 0.22 0.68
Karlsruhe-----	3	Fair Low content of organic matter Carbonate content Droughty	0.12 0.68 0.90	Fair Depth to saturated zone	0.50	Fair Depth to saturated zone Hard to reclaim	0.50 0.68
Rosewood-----	3	Poor Too sandy Low content of organic matter Carbonate content	0.00 0.12 0.68	Poor Depth to saturated zone	0.00	Poor Too sandy Depth to saturated zone Rock fragments	0.00 0.00 0.88
Strandquist-----	3	Fair Low content of organic matter Water erosion	0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I28A: Deerwood-----	2	Poor Too sandy Wind erosion Low content of organic matter	0.00 0.00 0.12	Poor Depth to saturated zone	0.00	Poor Too sandy Depth to saturated zone Rock fragments	0.00 0.00 0.28
I29A: Hattie-----	75	Poor Too clayey Low content of organic matter	0.00 0.12	Poor Low strength Shrink-swell Depth to saturated zone	0.00 0.12 0.65	Poor Too clayey Depth to saturated zone	0.00 0.65
Clearwater-----	12	Poor Too clayey Low content of organic matter	0.00 0.12	Poor Depth to saturated zone Low strength Shrink-swell	0.00 0.00 0.12	Poor Depth to saturated zone Too clayey	0.00 0.00
Reis-----	6	Poor Too clayey Low content of organic matter Carbonate content	0.00 0.12 0.68	Poor Depth to saturated zone Low strength Shrink-swell	0.00 0.00 0.12	Poor Too clayey Depth to saturated zone Carbonate content	0.00 0.00 0.68
Hattie, very cobbly	5	Poor Too clayey Low content of organic matter	0.00 0.12	Poor Low strength Shrink-swell Depth to saturated zone	0.00 0.12 0.65	Poor Too clayey Depth to saturated zone	0.00 0.65
Hilaire-----	2	Poor Too sandy Low content of organic matter	0.00 0.12	Poor Low strength Shrink-swell Depth to saturated zone	0.00 0.86 0.88	Poor Too sandy Depth to saturated zone Rock fragments	0.00 0.88 0.97
I29D: Hattie-----	85	Poor Too clayey Low content of organic matter	0.00 0.12	Poor Low strength Shrink-swell Depth to saturated zone	0.00 0.12 0.65	Poor Too clayey Slope Depth to saturated zone	0.00 0.37 0.65
Clearwater-----	6	Poor Too clayey Low content of organic matter	0.00 0.12	Poor Depth to saturated zone Low strength Shrink-swell	0.00 0.00 0.12	Poor Depth to saturated zone Too clayey	0.00 0.00
Hattie, level-----	5	Poor Too clayey Low content of organic matter	0.00 0.12	Poor Low strength Shrink-swell Depth to saturated zone	0.00 0.12 0.65	Poor Too clayey Depth to saturated zone	0.00 0.65

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I29D: Boyerlake-----	4	Poor Too clayey Low content of organic matter Carbonate content Water erosion	0.00 0.12 0.92 0.99	Poor Low strength Shrink-swell Depth to saturated zone	0.00 0.12 0.65	Poor Too clayey Depth to saturated zone Carbonate content	0.00 0.65 0.92
I30A: Hedman-----	85	Fair Low content of organic matter Carbonate content Water erosion	0.12 0.68 0.99	Poor Depth to saturated zone	0.00	Poor Depth to saturated zone	0.00
Fram-----	5	Fair Low content of organic matter Carbonate content Water erosion	0.50 0.68 0.99	Fair Depth to saturated zone	0.88	Fair Carbonate content Depth to saturated zone	0.68 0.88
Strathcona-----	5	Fair Low content of organic matter Carbonate content Water erosion	0.12 0.92 0.99	Poor Depth to saturated zone	0.00	Poor Depth to saturated zone	0.00
Haug-----	3	Poor Wind erosion Low content of organic matter Water erosion	0.00 0.12 0.99	Poor Depth to saturated zone	0.00	Poor Depth to saturated zone	0.00
Strandquist-----	2	Fair Low content of organic matter Water erosion	0.12 0.99	Poor Depth to saturated zone	0.00	Poor Depth to saturated zone	0.00
I31A: Hedman-----	50	Fair Low content of organic matter Carbonate content Water erosion	0.12 0.68 0.99	Poor Depth to saturated zone	0.00	Poor Depth to saturated zone	0.00
Fram-----	40	Fair Low content of organic matter Carbonate content Water erosion	0.50 0.68 0.99	Fair Depth to saturated zone	0.88	Fair Carbonate content Depth to saturated zone	0.68 0.88
Strathcona-----	5	Fair Low content of organic matter Carbonate content Water erosion	0.12 0.92 0.99	Poor Depth to saturated zone	0.00	Poor Depth to saturated zone	0.00

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I31A:							
Haug-----	3	Poor Wind erosion Low content of organic matter Water erosion	0.00 0.12 0.99	Poor Depth to saturated zone	0.00	Poor Depth to saturated zone	0.00
Strandquist-----	2	Fair Low content of organic matter Water erosion	0.12 0.99	Poor Depth to saturated zone	0.00	Poor Depth to saturated zone	0.00
I32A:							
Hilaire-----	75	Poor Too sandy Low content of organic matter	0.00 0.12	Poor Low strength Shrink-swell Depth to saturated zone	0.00 0.86 0.88	Poor Too sandy Depth to saturated zone Rock fragments	0.00 0.88 0.97
Espelie-----	12	Poor Too clayey Low content of organic matter	0.00 0.12	Poor Depth to saturated zone Low strength Shrink-swell	0.00 0.00 0.57	Poor Depth to saturated zone Too clayey	0.00 0.00
Huot-----	5	Fair Low content of organic matter Carbonate content	0.12 0.68	Poor Low strength Shrink-swell Depth to saturated zone	0.00 0.86 0.88	Fair Depth to saturated zone Rock fragments	0.88 0.97
Flaming-----	2	Poor Too sandy Wind erosion Low content of organic matter Droughty	0.00 0.00 0.12 0.75	Fair Depth to saturated zone	0.88	Poor Too sandy Depth to saturated zone	0.00 0.88
Foxlake-----	2	Poor Too clayey Low content of organic matter	0.00 0.12	Poor Depth to saturated zone Low strength Shrink-swell	0.00 0.00 0.38	Poor Depth to saturated zone Too clayey	0.00 0.00
Wheatville-----	2	Fair Low content of organic matter Carbonate content Water erosion	0.12 0.32 0.90	Poor Low strength Depth to saturated zone Shrink-swell	0.00 0.06 0.80	Fair Depth to saturated zone Carbonate content	0.06 0.32
Thiefriver-----	1	Fair Low content of organic matter Carbonate content	0.12 0.68	Poor Depth to saturated zone Low strength Shrink-swell	0.00 0.00 0.82	Poor Depth to saturated zone	0.00

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I32A: Wyandotte-----	1	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Too sandy	0.32	Low strength	0.00	Rock fragments	0.00
		Carbonate content	0.92	Shrink-swell	0.86	Too sandy	0.32
I33A: Hilaire-----	75	Poor		Poor		Poor	
		Too sandy	0.00	Low strength	0.00	Too sandy	0.00
		Wind erosion	0.00	Shrink-swell	0.86	Depth to saturated zone	0.88
		Low content of organic matter	0.12	Depth to saturated zone	0.88	Rock fragments	0.97
Espelie-----	12	Poor		Poor		Poor	
		Too clayey	0.00	Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Low content of organic matter	0.12	Low strength	0.00	Too clayey	0.00
				Shrink-swell	0.57		
Huot-----	5	Fair		Poor		Fair	
		Low content of organic matter	0.12	Low strength	0.00	Depth to saturated zone	0.88
		Carbonate content	0.68	Shrink-swell	0.86	Rock fragments	0.97
				Depth to saturated zone	0.88		
Flaming-----	2	Poor		Fair		Poor	
		Too sandy	0.00	Depth to saturated zone	0.88	Too sandy	0.00
		Wind erosion	0.00			Depth to saturated zone	0.88
		Low content of organic matter	0.12				
		Droughty	0.75				
Foxlake-----	2	Poor		Poor		Poor	
		Too clayey	0.00	Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Low content of organic matter	0.12	Low strength	0.00	Too clayey	0.00
				Shrink-swell	0.38		
Wheatville-----	2	Fair		Poor		Fair	
		Low content of organic matter	0.12	Low strength	0.00	Depth to saturated zone	0.06
		Carbonate content	0.32	Depth to saturated zone	0.06	Carbonate content	0.32
		Water erosion	0.90	Shrink-swell	0.80		
Thiefriver-----	1	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Carbonate content	0.68	Low strength	0.00		
				Shrink-swell	0.82		
Wyandotte-----	1	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Too sandy	0.32	Low strength	0.00	Rock fragments	0.00
		Carbonate content	0.92	Shrink-swell	0.86	Too sandy	0.32

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>I34A:</b>							
Huot-----	75	Fair		Poor		Fair	
		Low content of organic matter	0.12	Low strength	0.00	Depth to saturated zone	0.88
		Carbonate content	0.68	Shrink-swell	0.86	Rock fragments	0.97
				Depth to saturated zone	0.88		
Thiefriever-----	12	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Carbonate content	0.68	Low strength	0.00		
				Shrink-swell	0.82		
Hilaire-----	5	Poor		Poor		Poor	
		Too sandy	0.00	Low strength	0.00	Too sandy	0.00
		Low content of organic matter	0.12	Shrink-swell	0.86	Depth to saturated zone	0.88
				Depth to saturated zone	0.88	Rock fragments	0.97
Flaming-----	3	Poor		Fair		Poor	
		Too sandy	0.00	Depth to saturated zone	0.88	Too sandy	0.00
		Wind erosion	0.00			Depth to saturated zone	0.88
		Low content of organic matter	0.12				
		Droughty	0.75				
Foxlake-----	3	Poor		Poor		Poor	
		Too clayey	0.00	Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Low content of organic matter	0.12	Low strength	0.00	Too clayey	0.00
				Shrink-swell	0.38		
Ulen-----	2	Fair		Fair		Fair	
		Too sandy	0.16	Depth to saturated zone	0.50	Too sandy	0.16
		Low content of organic matter	0.50			Depth to saturated zone	0.50
		Carbonate content	0.68			Carbonate content	0.68
		Droughty	0.99				
<b>I35A:</b>							
Karlsruhe-----	70	Fair		Fair		Fair	
		Low content of organic matter	0.12	Depth to saturated zone	0.50	Depth to saturated zone	0.50
		Carbonate content	0.68			Hard to reclaim	0.68
		Droughty	0.90				
Syrene-----	10	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Droughty	0.17			Rock fragments	0.00
		Too sandy	0.22			Too sandy	0.22
		Carbonate content	0.68			Hard to reclaim	0.68

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I35A: Ulen-----	10	Poor Wind erosion Too sandy Low content of organic matter Carbonate content Droughty	 0.00 0.16 0.50 0.68 0.93	Fair Depth to saturated zone	 0.50	Fair Too sandy Depth to saturated zone Carbonate content	 0.16 0.50 0.68
Radium-----	5	Poor Too sandy Wind erosion Low content of organic matter Droughty	 0.00 0.00 0.12 0.82	Good		Poor Too sandy Rock fragments	 0.00 0.50
Rosewood-----	3	Poor Too sandy Low content of organic matter Carbonate content	 0.00 0.12 0.68	Poor Depth to saturated zone	0.00	Poor Too sandy Depth to saturated zone Rock fragments	 0.00 0.00 0.88
Sandberg-----	2	Poor Wind erosion Low content of organic matter Droughty Too sandy	 0.00 0.12 0.14 0.47	Good		Fair Rock fragments Too sandy Hard to reclaim	 0.12 0.47 0.92
I36A: Kittson-----	70	Fair Low content of organic matter Carbonate content Water erosion	 0.12 0.92 0.99	Fair Low strength Depth to saturated zone	0.22 0.88	Fair Depth to saturated zone Carbonate content	 0.88 0.92
Roliss-----	12	Fair Low content of organic matter Water erosion	 0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	 0.00
Hamerly-----	5	Fair Low content of organic matter Carbonate content Water erosion	 0.12 0.68 0.99	Fair Depth to saturated zone Low strength	0.06 0.22	Fair Depth to saturated zone Carbonate content	 0.06 0.68
Kratka-----	5	Fair Low content of organic matter Water erosion	 0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	 0.00
Grimstad-----	3	Fair Low content of organic matter Too sandy Carbonate content Water erosion	 0.12 0.16 0.92 0.99	Fair Depth to saturated zone Low strength	0.12 0.22	Fair Depth to saturated zone Too sandy Carbonate content	 0.12 0.16 0.92

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I36A: Strandquist-----	3	Fair Low content of organic matter Water erosion	0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
Foxhome-----	2	Fair Low content of organic matter Water erosion	0.12 0.99	Fair Low strength Depth to saturated zone	0.22 0.88	Fair Depth to saturated zone	0.88
I37A: Kratka, depressional	45	Poor Wind erosion Low content of organic matter Water erosion	0.00 0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
Strathcona, depressional-----	45	Fair Low content of organic matter Carbonate content Water erosion	0.12 0.92 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
Northwood-----	5	Poor Wind erosion Low content of organic matter Water erosion	0.00 0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
Kratka-----	2	Fair Low content of organic matter Water erosion	0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
Strathcona-----	2	Fair Low content of organic matter Carbonate content Water erosion	0.12 0.92 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
Roliss-----	1	Fair Low content of organic matter Water erosion	0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
I38A: Kratka-----	70	Fair Low content of organic matter Water erosion	0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
Smiley-----	7	Fair Low content of organic matter Carbonate content Water erosion	0.12 0.92 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone Carbonate content	0.00 0.92

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I38A:							
Foldahl-----	5	Poor		Fair		Poor	
		Too sandy	0.00	Low strength	0.22	Too sandy	0.00
		Low content of organic matter	0.12	Depth to saturated zone	0.88	Depth to saturated zone	0.88
		Water erosion	0.99				
Kratka, very cobbly	5	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Water erosion	0.99	Low strength	0.22		
Strathcona-----	5	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Carbonate content	0.92	Low strength	0.22		
		Water erosion	0.99				
Kratka, depressional	3	Poor		Poor		Poor	
		Wind erosion	0.00	Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Low content of organic matter	0.12	Low strength	0.22		
		Water erosion	0.99				
Strandquist-----	3	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Water erosion	0.99	Low strength	0.22		
Linveldt-----	2	Poor		Fair		Poor	
		Too sandy	0.00	Low strength	0.22	Too sandy	0.00
		Low content of organic matter	0.12	Depth to saturated zone	0.88	Rock fragments	0.50
		Carbonate content	0.97			Depth to saturated zone	0.88
		Water erosion	0.99				
I39A:							
Linveldt-----	65	Poor		Fair		Poor	
		Too sandy	0.00	Low strength	0.22	Too sandy	0.00
		Low content of organic matter	0.12	Depth to saturated zone	0.88	Rock fragments	0.50
		Carbonate content	0.97			Depth to saturated zone	0.88
		Water erosion	0.99				
Kratka-----	14	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Water erosion	0.99	Low strength	0.22		
Reiner-----	10	Fair		Fair		Fair	
		Low content of organic matter	0.12	Low strength	0.22	Depth to saturated zone	0.88
		Carbonate content	0.97	Depth to saturated zone	0.88	Carbonate content	0.97
		Water erosion	0.99				

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>I39A:</b>							
Smiley-----	5	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Carbonate content	0.92	Low strength	0.22	Carbonate content	0.92
		Water erosion	0.99				
Eckvoll-----	3	Poor		Fair		Poor	
		Too sandy	0.00	Low strength	0.22	Too sandy	0.00
		Wind erosion	0.00	Depth to saturated zone	0.88	Depth to saturated zone	0.88
		Low content of organic matter	0.12				
		Water erosion	0.99				
Foldahl-----	2	Poor		Fair		Poor	
		Too sandy	0.00	Low strength	0.22	Too sandy	0.00
		Low content of organic matter	0.12	Depth to saturated zone	0.88	Depth to saturated zone	0.88
		Water erosion	0.99				
Pelan-----	1	Fair		Fair		Fair	
		Low content of organic matter	0.12	Low strength	0.22	Depth to saturated zone	0.88
		Water erosion	0.99	Depth to saturated zone	0.88		
<b>I40B:</b>							
Maddock-----	85	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Wind erosion	0.00				
		Low content of organic matter	0.12				
		Droughty	0.65				
Flaming-----	5	Poor		Fair		Poor	
		Too sandy	0.00	Depth to saturated zone	0.88	Too sandy	0.00
		Wind erosion	0.00			Depth to saturated zone	0.88
		Low content of organic matter	0.12				
		Droughty	0.75				
Sandberg-----	5	Poor		Good		Fair	
		Wind erosion	0.00			Rock fragments	0.12
		Low content of organic matter	0.12			Too sandy	0.47
		Droughty	0.14			Hard to reclaim	0.92
		Too sandy	0.47				
Halverson-----	3	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Wind erosion	0.00				
		Low content of organic matter	0.12				
		Carbonate content	0.68				
		Water erosion	0.99				

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I40B: Hamar-----	2	Poor Too sandy Wind erosion Low content of organic matter Droughty	0.00 0.00 0.12 0.83	Poor Depth to saturated zone	0.00	Poor Too sandy Depth to saturated zone	0.00 0.00
I40F: Maddock-----	90	Poor Too sandy Wind erosion Low content of organic matter Droughty	0.00 0.00 0.12 0.65	Fair Slope	0.32	Poor Too sandy Slope	0.00 0.00
Flaming-----	5	Poor Too sandy Wind erosion Low content of organic matter Droughty	0.00 0.00 0.12 0.75	Fair Depth to saturated zone	0.88	Poor Too sandy Depth to saturated zone	0.00 0.88
Sandberg-----	5	Poor Wind erosion Low content of organic matter Droughty Too sandy	0.00 0.12 0.14 0.47	Good		Fair Rock fragments Too sandy Hard to reclaim	0.12 0.47 0.92
I41A: Markey-----	80	Not rated		Poor Depth to saturated zone	0.00	Not rated	
Deerwood-----	12	Poor Too sandy Wind erosion Low content of organic matter	0.00 0.00 0.12	Poor Depth to saturated zone	0.00	Poor Too sandy Depth to saturated zone Rock fragments	0.00 0.00 0.28
Berner-----	2	Not rated		Poor Depth to saturated zone Low strength	0.00 0.22	Not rated	
Hamar-----	2	Poor Too sandy Wind erosion Low content of organic matter Droughty	0.00 0.00 0.12 0.83	Poor Depth to saturated zone	0.00	Poor Too sandy Depth to saturated zone	0.00 0.00
Seelyeville-----	2	Not rated		Poor Depth to saturated zone	0.00	Not rated	

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I41A: Syrene-----	2	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Droughty	0.17			Rock fragments	0.00
		Too sandy	0.22			Too sandy	0.22
		Carbonate content	0.68			Hard to reclaim	0.68
I42A: Markey, ponded-----	85	Not rated		Poor		Not rated	
				Depth to saturated zone	0.00		
Markey-----	5	Not rated		Poor		Not rated	
				Depth to saturated zone	0.00		
Deerwood-----	4	Poor		Poor		Poor	
		Too sandy	0.00	Depth to saturated zone	0.00	Too sandy	0.00
		Wind erosion	0.00			Depth to saturated zone	0.00
		Low content of organic matter	0.12			Rock fragments	0.28
Seelyeville, ponded	4	Not rated		Poor		Not rated	
				Depth to saturated zone	0.00		
Hamar-----	1	Poor		Poor		Poor	
		Too sandy	0.00	Depth to saturated zone	0.00	Too sandy	0.00
		Wind erosion	0.00			Depth to saturated zone	0.00
		Low content of organic matter	0.12				
		Droughty	0.83				
Hangaard-----	1	Poor		Poor		Poor	
		Too sandy	0.00	Depth to saturated zone	0.00	Too sandy	0.00
		Droughty	0.09			Depth to saturated zone	0.00
		Low content of organic matter	0.12			Rock fragments	0.03
						Hard to reclaim	0.98
I43A: Mavie-----	70	Poor		Poor		Poor	
		Too sandy	0.00	Depth to saturated zone	0.00	Too sandy	0.00
		Low content of organic matter	0.12	Low strength	0.22	Depth to saturated zone	0.00
		Carbonate content	0.68			Rock fragments	0.00
		Water erosion	0.99			Carbonate content	0.97
Vallers-----	10	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Carbonate content	0.68	Low strength	0.22		
		Water erosion	0.99				
Strandquist-----	7	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Water erosion	0.99	Low strength	0.22		

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I43A: Strathcona-----	5	Fair Low content of organic matter Carbonate content Water erosion	0.12 0.92 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
Strathcona, depressional-----	3	Fair Low content of organic matter Carbonate content Water erosion	0.12 0.92 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
Foxhome-----	2	Fair Low content of organic matter Water erosion	0.12 0.99	Fair Low strength Depth to saturated zone	0.22 0.88	Fair Depth to saturated zone	0.88
Karlsruhe-----	2	Fair Low content of organic matter Carbonate content Droughty	0.12 0.68 0.90	Fair Depth to saturated zone	0.50	Fair Depth to saturated zone Hard to reclaim	0.50 0.68
Grimstad-----	1	Fair Low content of organic matter Too sandy Carbonate content Water erosion	0.12 0.16 0.92 0.99	Fair Depth to saturated zone Low strength	0.12 0.22	Fair Depth to saturated zone Too sandy Carbonate content	0.12 0.16 0.92
I44A: Newfolden-----	75	Fair Low content of organic matter Carbonate content Water erosion	0.12 0.92 0.99	Fair Low strength Depth to saturated zone Shrink-swell	0.22 0.88 0.99	Fair Depth to saturated zone Carbonate content	0.88 0.92
Smiley-----	12	Fair Low content of organic matter Carbonate content Water erosion	0.12 0.92 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone Carbonate content	0.00 0.92
Boash-----	8	Poor Too clayey Low content of organic matter Water erosion	0.00 0.12 0.99	Poor Depth to saturated zone Low strength Shrink-swell	0.00 0.22 0.87	Poor Depth to saturated zone Too clayey	0.00 0.00
Linveltdt-----	4	Poor Too sandy Low content of organic matter Carbonate content Water erosion	0.00 0.12 0.97 0.99	Fair Low strength Depth to saturated zone	0.22 0.88	Poor Too sandy Rock fragments Depth to saturated zone	0.00 0.50 0.88

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I44A: Hapludolls-----	1	Fair Low content of organic matter	0.12	Good		Fair Slope	0.37
I45A: Northwood-----	75	Poor Wind erosion Low content of organic matter Water erosion	0.00 0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
Hamre-----	10	Poor Wind erosion Low content of organic matter Water erosion	0.00 0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
Berner-----	5	Not rated		Poor Depth to saturated zone Low strength	0.00 0.22	Not rated	
Kratka-----	5	Fair Low content of organic matter Water erosion	0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
Strandquist-----	3	Fair Low content of organic matter Water erosion	0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
Roliss-----	2	Fair Low content of organic matter Water erosion	0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
I46A: Pits-----	85	Not rated		Not rated		Not rated	
Udipsamments-----	10	Poor Too sandy Wind erosion Low content of organic matter Droughty	0.00 0.00 0.02 0.86	Poor Slope	0.00	Poor Too sandy Slope	0.00 0.00
Radium-----	2	Poor Too sandy Wind erosion Low content of organic matter Droughty	0.00 0.00 0.12 0.82	Good		Poor Too sandy Rock fragments	0.00 0.50
Maddock-----	1	Poor Too sandy Wind erosion Low content of organic matter Droughty	0.00 0.00 0.12 0.65	Good		Poor Too sandy	0.00

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I46A: Marquette-----	1	Poor Wind erosion Droughty Low content of organic matter	0.00 0.01 0.12	Good		Poor Rock fragments Hard to reclaim	0.00 0.02
Sandberg-----	1	Poor Wind erosion Low content of organic matter Droughty Too sandy	0.00 0.12 0.14 0.47	Good		Fair Rock fragments Too sandy Hard to reclaim	0.12 0.47 0.92
I47A: Poppleton-----	75	Poor Too sandy Wind erosion Low content of organic matter Droughty	0.00 0.00 0.12 0.81	Fair Depth to saturated zone	0.88	Poor Too sandy Depth to saturated zone	0.00 0.88
Flaming-----	12	Poor Too sandy Wind erosion Low content of organic matter Droughty	0.00 0.00 0.12 0.75	Fair Depth to saturated zone	0.88	Poor Too sandy Depth to saturated zone	0.00 0.88
Garborg-----	5	Poor Wind erosion Too sandy	0.00 0.45	Fair Depth to saturated zone	0.12	Fair Depth to saturated zone Too sandy	0.12 0.45
Hamar-----	3	Poor Too sandy Wind erosion Low content of organic matter Droughty	0.00 0.00 0.12 0.83	Poor Depth to saturated zone	0.00	Poor Too sandy Depth to saturated zone	0.00 0.00
Radium-----	2	Poor Too sandy Wind erosion Low content of organic matter Droughty	0.00 0.00 0.12 0.82	Good		Poor Too sandy Rock fragments	0.00 0.50
Ulen-----	2	Poor Wind erosion Too sandy Low content of organic matter Carbonate content Droughty	0.00 0.16 0.50 0.68 0.93	Fair Depth to saturated zone	0.50	Fair Too sandy Depth to saturated zone Carbonate content	0.16 0.50 0.68

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I47A: Maddock-----	1	Poor Too sandy Wind erosion Low content of organic matter Droughty	0.00 0.00 0.12 0.65	Good		Poor Too sandy	0.00
I48A: Radium-----	75	Poor Too sandy Wind erosion Low content of organic matter Droughty	0.00 0.00 0.12 0.82	Good		Poor Too sandy Rock fragments	0.00 0.50
Sandberg-----	7	Poor Wind erosion Low content of organic matter Droughty Too sandy	0.00 0.12 0.14 0.47	Good		Fair Rock fragments Too sandy Hard to reclaim	0.12 0.47 0.92
Oylen-----	5	Poor Too sandy Low content of organic matter	0.00 0.12	Good		Poor Too sandy Rock fragments	0.00 0.88
Flaming-----	4	Poor Too sandy Wind erosion Low content of organic matter Droughty	0.00 0.00 0.12 0.75	Fair Depth to saturated zone	0.88	Poor Too sandy Depth to saturated zone	0.00 0.88
Garborg-----	3	Poor Wind erosion Too sandy	0.00 0.45	Fair Depth to saturated zone	0.12	Fair Depth to saturated zone Too sandy	0.12 0.45
Hangaard-----	3	Poor Too sandy Droughty Low content of organic matter	0.00 0.09 0.12	Poor Depth to saturated zone	0.00	Poor Too sandy Depth to saturated zone Rock fragments Hard to reclaim	0.00 0.00 0.03 0.98
Hamar-----	2	Poor Too sandy Wind erosion Low content of organic matter Droughty	0.00 0.00 0.12 0.83	Poor Depth to saturated zone	0.00	Poor Too sandy Depth to saturated zone	0.00 0.00
Poppleton-----	1	Poor Too sandy Wind erosion Low content of organic matter Droughty	0.00 0.00 0.12 0.81	Fair Depth to saturated zone	0.88	Poor Too sandy Depth to saturated zone	0.00 0.88

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I49A:							
Rauville-----	80	Good		Poor Depth to saturated zone Low strength Shrink-swell	0.00 0.00 0.98	Poor Depth to saturated zone	0.00
Fluvaquents-----	12	Good		Poor Depth to saturated zone	0.00	Poor Depth to saturated zone Rock fragments	0.00 0.88
Water-----	5	Not rated		Not rated		Not rated	
Lamoure-----	3	Good		Poor Depth to saturated zone Low strength Shrink-swell	0.00 0.00 0.94	Poor Depth to saturated zone	0.00
I50A:							
Reiner-----	70	Fair Low content of organic matter Carbonate content Water erosion	0.12 0.97 0.99	Fair Low strength Depth to saturated zone	0.22 0.88	Fair Depth to saturated zone Carbonate content	0.88 0.97
Smiley-----	12	Fair Low content of organic matter Carbonate content Water erosion	0.12 0.92 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone Carbonate content	0.00 0.92
Reiner, very cobbly	7	Fair Low content of organic matter Carbonate content Water erosion	0.12 0.97 0.99	Fair Low strength Depth to saturated zone	0.22 0.88	Fair Depth to saturated zone Carbonate content	0.88 0.97
Linveldt-----	5	Poor Too sandy Low content of organic matter Carbonate content Water erosion	0.00 0.12 0.97 0.99	Fair Low strength Depth to saturated zone	0.22 0.88	Poor Too sandy Rock fragments Depth to saturated zone	0.00 0.50 0.88
Eckvoll-----	3	Poor Too sandy Wind erosion Low content of organic matter Water erosion	0.00 0.00 0.12 0.99	Fair Low strength Depth to saturated zone	0.22 0.88	Poor Too sandy Depth to saturated zone	0.00 0.88
Kratka-----	3	Fair Low content of organic matter Water erosion	0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I51A: Reiner-----	65	Poor Wind erosion Low content of organic matter Carbonate content Water erosion	0.00 0.12 0.97 0.99	Fair Low strength Depth to saturated zone	0.22 0.88	Fair Depth to saturated zone Carbonate content	0.88 0.97
Smiley-----	9	Fair Low content of organic matter Carbonate content Water erosion	0.12 0.92 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone Carbonate content	0.00 0.92
Reiner fine sandy loam-----	8	Fair Low content of organic matter Carbonate content Water erosion	0.12 0.97 0.99	Fair Low strength Depth to saturated zone	0.22 0.88	Fair Depth to saturated zone Carbonate content	0.88 0.97
Linveldt-----	7	Poor Too sandy Low content of organic matter Carbonate content Water erosion	0.00 0.12 0.97 0.99	Fair Low strength Depth to saturated zone	0.22 0.88	Poor Too sandy Rock fragments Depth to saturated zone	0.00 0.50 0.88
Kratka-----	5	Fair Low content of organic matter Water erosion	0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
Eckvoll-----	3	Poor Too sandy Wind erosion Low content of organic matter Water erosion	0.00 0.00 0.12 0.99	Fair Low strength Depth to saturated zone	0.22 0.88	Poor Too sandy Depth to saturated zone	0.00 0.88
Reiner, very cobbly	3	Fair Low content of organic matter Carbonate content Water erosion	0.12 0.97 0.99	Fair Low strength Depth to saturated zone	0.22 0.88	Fair Depth to saturated zone Carbonate content	0.88 0.97
I52A: Reis-----	55	Poor Too clayey Low content of organic matter Carbonate content	0.00 0.12 0.68	Poor Depth to saturated zone Low strength Shrink-swell	0.00 0.00 0.12	Poor Too clayey Depth to saturated zone Carbonate content	0.00 0.00 0.68
Clearwater-----	30	Poor Too clayey Low content of organic matter	0.00 0.12	Poor Depth to saturated zone Low strength Shrink-swell	0.00 0.00 0.12	Poor Depth to saturated zone Too clayey	0.00 0.00

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I52A: Clearwater, very cobble-----	5	Poor Too clayey Low content of organic matter	0.00 0.12	Poor Depth to saturated zone Low strength Shrink-swell	0.00 0.00 0.12	Poor Depth to saturated zone Too clayey	0.00 0.00 0.00
Clearwater, depressional-----	3	Poor Too clayey Low content of organic matter	0.00 0.12	Poor Depth to saturated zone Low strength Shrink-swell	0.00 0.00 0.12	Poor Depth to saturated zone Too clayey	0.00 0.00 0.00
Espelie-----	3	Poor Too clayey Low content of organic matter	0.00 0.12	Poor Depth to saturated zone Low strength Shrink-swell	0.00 0.00 0.57	Poor Depth to saturated zone Too clayey	0.00 0.00 0.00
Hattie-----	3	Poor Too clayey Low content of organic matter	0.00 0.12	Poor Low strength Shrink-swell Depth to saturated zone	0.00 0.12 0.65	Poor Too clayey Depth to saturated zone	0.00 0.65 0.00
Wyandotte-----	1	Fair Low content of organic matter Too sandy Carbonate content	0.12 0.32 0.92	Poor Depth to saturated zone Low strength Shrink-swell	0.00 0.00 0.86	Poor Depth to saturated zone Rock fragments Too sandy	0.00 0.00 0.00 0.32
I53A: Roliss-----	75	Fair Low content of organic matter Water erosion	0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00 0.00
Kratka-----	8	Fair Low content of organic matter Water erosion	0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00 0.00
Roliss, very cobble	7	Fair Low content of organic matter Water erosion	0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00 0.00
Kittson-----	5	Fair Low content of organic matter Carbonate content Water erosion	0.12 0.92 0.99	Fair Low strength Depth to saturated zone	0.22 0.88	Fair Depth to saturated zone Carbonate content	0.88 0.92
Roliss, depressional	3	Fair Low content of organic matter Water erosion	0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00 0.00

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I53A: Smiley-----	2	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Carbonate content	0.92	Low strength	0.22	Carbonate content	0.92
		Water erosion	0.99				
I54A: Roliss, depressional	80	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Water erosion	0.99	Low strength	0.22		
Roliss-----	12	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Water erosion	0.99	Low strength	0.22		
Hamre-----	5	Poor		Poor		Poor	
		Wind erosion	0.00	Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Low content of organic matter	0.12	Low strength	0.22		
		Water erosion	0.99				
Kratka-----	3	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Water erosion	0.99	Low strength	0.22		
I55A: Rosewood-----	75	Poor		Poor		Poor	
		Too sandy	0.00	Depth to saturated zone	0.00	Too sandy	0.00
		Low content of organic matter	0.12			Depth to saturated zone	0.00
		Carbonate content	0.68			Rock fragments	0.88
Ulen-----	10	Fair		Fair		Fair	
		Too sandy	0.16	Depth to saturated zone	0.50	Too sandy	0.16
		Low content of organic matter	0.50			Depth to saturated zone	0.50
		Carbonate content	0.68			Carbonate content	0.68
		Droughty	0.99				
Hamar-----	6	Poor		Poor		Poor	
		Too sandy	0.00	Depth to saturated zone	0.00	Too sandy	0.00
		Wind erosion	0.00			Depth to saturated zone	0.00
		Low content of organic matter	0.12				
		Droughty	0.83				
Rosewood, depressional-----	3	Poor		Poor		Poor	
		Too sandy	0.00	Depth to saturated zone	0.00	Too sandy	0.00
		Low content of organic matter	0.12			Depth to saturated zone	0.00
		Carbonate content	0.68			Rock fragments	0.88

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I55A:							
Syrene-----	3	Fair Low content of organic matter Droughty Too sandy Carbonate content	0.12 0.17 0.22 0.68	Poor Depth to saturated zone	0.00	Poor Depth to saturated zone Rock fragments Too sandy Hard to reclaim	0.00 0.00 0.22 0.68
Karlsruhe-----	1	Fair Low content of organic matter Carbonate content Droughty	0.12 0.68 0.90	Fair Depth to saturated zone	0.50	Fair Depth to saturated zone Hard to reclaim	0.50 0.68
Strathcona-----	1	Fair Low content of organic matter Carbonate content Water erosion	0.12 0.92 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
Thiefriver-----	1	Fair Low content of organic matter Carbonate content	0.12 0.68	Poor Depth to saturated zone Low strength Shrink-swell	0.00 0.00 0.82	Poor Depth to saturated zone	0.00
I56A:							
Rosewood-----	50	Poor Too sandy Low content of organic matter Carbonate content	0.00 0.12 0.68	Poor Depth to saturated zone	0.00	Poor Too sandy Depth to saturated zone Rock fragments	0.00 0.00 0.88
Venlo-----	40	Poor Too sandy Low content of organic matter Droughty	0.00 0.12 0.93	Poor Depth to saturated zone	0.00	Poor Too sandy Depth to saturated zone	0.00 0.00
Deerwood-----	3	Poor Too sandy Wind erosion Low content of organic matter	0.00 0.00 0.12	Poor Depth to saturated zone	0.00	Poor Too sandy Depth to saturated zone Rock fragments	0.00 0.00 0.28
Syrene-----	3	Fair Low content of organic matter Droughty Too sandy Carbonate content	0.12 0.17 0.22 0.68	Poor Depth to saturated zone	0.00	Poor Depth to saturated zone Rock fragments Too sandy Hard to reclaim	0.00 0.00 0.22 0.68
Ulen-----	2	Poor Wind erosion Too sandy Low content of organic matter Carbonate content Droughty	0.00 0.16 0.50 0.68 0.93	Fair Depth to saturated zone	0.50	Fair Too sandy Depth to saturated zone Carbonate content	0.16 0.50 0.68

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I56A: Strathcona-----	1	Fair Low content of organic matter Carbonate content Water erosion	0.12 0.92 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
Thiefriever-----	1	Fair Low content of organic matter Carbonate content	0.12 0.68	Poor Depth to saturated zone Low strength Shrink-swell	0.00 0.00 0.82	Poor Depth to saturated zone	0.00
I57B: Sandberg-----	50	Poor Wind erosion Low content of organic matter Droughty Too sandy	0.00 0.12 0.14 0.47	Good		Fair Rock fragments Too sandy Hard to reclaim	0.12 0.47 0.92
Radium-----	25	Poor Too sandy Wind erosion Low content of organic matter Droughty	0.00 0.00 0.12 0.82	Good		Poor Too sandy Rock fragments	0.00 0.50
Sioux-----	8	Poor Too sandy Droughty Low content of organic matter	0.00 0.10 0.12	Good		Poor Too sandy Rock fragments Hard to reclaim	0.00 0.00 0.00
Oylen-----	7	Poor Too sandy Low content of organic matter	0.00 0.12	Good		Poor Too sandy Rock fragments	0.00 0.88
Flaming-----	5	Poor Too sandy Wind erosion Low content of organic matter Droughty	0.00 0.00 0.12 0.75	Fair Depth to saturated zone	0.88	Poor Too sandy Depth to saturated zone	0.00 0.88
Garborg-----	5	Poor Wind erosion Too sandy	0.00 0.45	Fair Depth to saturated zone	0.12	Fair Depth to saturated zone Too sandy	0.12 0.45
I58A: Seelyeville-----	90	Not rated		Poor Depth to saturated zone	0.00	Not rated	
Cathro-----	3	Poor Wind erosion Low content of organic matter Water erosion	0.00 0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I58A:							
Dora-----	3	Not rated		Poor		Not rated	
				Depth to saturated zone	0.00		
				Low strength	0.00		
				Shrink-swell	0.95		
Markey-----	3	Not rated		Poor		Not rated	
				Depth to saturated zone	0.00		
Berner-----	1	Not rated		Poor		Not rated	
				Depth to saturated zone	0.00		
				Low strength	0.22		
I59A:							
Smiley-----	65	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Carbonate content	0.92	Low strength	0.22	Carbonate content	0.92
		Water erosion	0.99				
Smiley, very cobbly	10	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Carbonate content	0.92	Low strength	0.22	Carbonate content	0.92
		Water erosion	0.99				
Kratka-----	9	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Water erosion	0.99	Low strength	0.22		
Roliss-----	5	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Water erosion	0.99	Low strength	0.22		
Reiner-----	4	Fair		Fair		Fair	
		Low content of organic matter	0.12	Low strength	0.22	Depth to saturated zone	0.88
		Carbonate content	0.97	Depth to saturated zone	0.88	Carbonate content	0.97
		Water erosion	0.99				
Linveldt-----	3	Poor		Fair		Poor	
		Too sandy	0.00	Low strength	0.22	Too sandy	0.00
		Low content of organic matter	0.12	Depth to saturated zone	0.88	Rock fragments	0.50
		Carbonate content	0.97			Depth to saturated zone	0.88
		Water erosion	0.99				
Smiley, depressional	3	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Carbonate content	0.92	Low strength	0.22	Carbonate content	0.92
		Water erosion	0.99				

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I59A: Strandquist-----	1	Fair Low content of organic matter Water erosion	0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
I60A: Smiley, depressional	80	Fair Low content of organic matter Carbonate content Water erosion	0.12 0.92 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone Carbonate content	0.00 0.92
Smiley-----	10	Fair Low content of organic matter Carbonate content Water erosion	0.12 0.92 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone Carbonate content	0.00 0.92
Hamre-----	5	Poor Wind erosion Low content of organic matter Water erosion	0.00 0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
Kratka-----	5	Fair Low content of organic matter Water erosion	0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
I61A: Strandquist-----	70	Fair Low content of organic matter Water erosion	0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
Mavie-----	8	Poor Too sandy Low content of organic matter Carbonate content Water erosion	0.00 0.12 0.68 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Too sandy Depth to saturated zone Rock fragments Carbonate content	0.00 0.00 0.97
Roliss-----	7	Fair Low content of organic matter Water erosion	0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
Kratka-----	5	Fair Low content of organic matter Water erosion	0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
Foxhome-----	4	Fair Low content of organic matter Water erosion	0.12 0.99	Fair Low strength Depth to saturated zone	0.22 0.88	Fair Depth to saturated zone	0.88

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I61A: Hangaard-----	3	Poor Too sandy Droughty Low content of organic matter	0.00 0.09 0.12	Poor Depth to saturated zone	0.00	Poor Too sandy Depth to saturated zone Rock fragments Hard to reclaim	0.00 0.00 0.03 0.98
Northwood-----	3	Poor Wind erosion Low content of organic matter Water erosion	0.00 0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
I62A: Syrene-----	70	Fair Low content of organic matter Droughty Too sandy Carbonate content	0.12 0.17 0.22 0.68	Poor Depth to saturated zone	0.00	Poor Depth to saturated zone Rock fragments Too sandy Hard to reclaim	0.00 0.00 0.22 0.68
Rosewood-----	11	Poor Too sandy Low content of organic matter Carbonate content	0.00 0.12 0.68	Poor Depth to saturated zone	0.00	Poor Too sandy Depth to saturated zone Rock fragments	0.00 0.00 0.88
Hangaard-----	5	Poor Too sandy Droughty Low content of organic matter	0.00 0.09 0.12	Poor Depth to saturated zone	0.00	Poor Too sandy Depth to saturated zone Rock fragments Hard to reclaim	0.00 0.00 0.03 0.98
Karlsruhe-----	4	Fair Low content of organic matter Carbonate content Droughty	0.12 0.68 0.90	Fair Depth to saturated zone	0.50	Fair Depth to saturated zone Hard to reclaim	0.50 0.68
Deerwood-----	3	Poor Too sandy Wind erosion Low content of organic matter	0.00 0.00 0.12	Poor Depth to saturated zone	0.00	Poor Too sandy Depth to saturated zone Rock fragments	0.00 0.00 0.28
Hamar-----	3	Poor Too sandy Wind erosion Low content of organic matter Droughty	0.00 0.00 0.12 0.83	Poor Depth to saturated zone	0.00	Poor Too sandy Depth to saturated zone	0.00 0.00
Strandquist-----	2	Fair Low content of organic matter Water erosion	0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I62A: Radium-----	1	Poor Too sandy Wind erosion Low content of organic matter Droughty	0.00 0.00 0.12 0.82	Good		Poor Too sandy Rock fragments	0.00 0.50
Wyandotte-----	1	Fair Low content of organic matter Too sandy Carbonate content	0.12 0.32 0.92	Poor Depth to saturated zone Low strength Shrink-swell	0.00 0.00 0.86	Poor Depth to saturated zone Rock fragments Too sandy	0.00 0.00 0.32
I63A: Thiefriever-----	70	Fair Low content of organic matter Carbonate content	0.12 0.68	Poor Depth to saturated zone Low strength Shrink-swell	0.00 0.00 0.82	Poor Depth to saturated zone	0.00
Espelie-----	10	Poor Too clayey Low content of organic matter	0.00 0.12	Poor Depth to saturated zone Low strength Shrink-swell	0.00 0.00 0.57	Poor Depth to saturated zone Too clayey	0.00 0.00
Foxlake-----	7	Poor Too clayey Low content of organic matter	0.00 0.12	Poor Depth to saturated zone Low strength Shrink-swell	0.00 0.00 0.38	Poor Depth to saturated zone Too clayey	0.00 0.00
Huot-----	5	Fair Low content of organic matter Carbonate content	0.12 0.68	Poor Low strength Shrink-swell Depth to saturated zone	0.00 0.86 0.88	Fair Depth to saturated zone Rock fragments	0.88 0.97
Clearwater, depressional-----	3	Poor Too clayey Low content of organic matter	0.00 0.12	Poor Depth to saturated zone Low strength Shrink-swell	0.00 0.00 0.12	Poor Depth to saturated zone Too clayey	0.00 0.00
Rosewood-----	3	Poor Too sandy Low content of organic matter Carbonate content	0.00 0.12 0.68	Poor Depth to saturated zone	0.00	Poor Too sandy Depth to saturated zone Rock fragments	0.00 0.00 0.88
Ulen-----	1	Fair Too sandy Low content of organic matter Carbonate content Droughty	0.16 0.50 0.68 0.99	Fair Depth to saturated zone	0.50	Fair Too sandy Depth to saturated zone Carbonate content	0.16 0.50 0.68

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I63A: Wyandotte-----	1	Fair Low content of organic matter Too sandy Carbonate content	0.12 0.32 0.92	Poor Depth to saturated zone Low strength Shrink-swell	0.00 0.00 0.86	Poor Depth to saturated zone Rock fragments Too sandy	0.00 0.00 0.32
I64A: Ulen-----	70	Fair Too sandy Low content of organic matter Carbonate content Droughty	0.16 0.50 0.68 0.99	Fair Depth to saturated zone	0.50	Fair Too sandy Depth to saturated zone Carbonate content	0.16 0.50 0.68
Rosewood-----	10	Poor Too sandy Low content of organic matter Carbonate content	0.00 0.12 0.68	Poor Depth to saturated zone	0.00	Poor Too sandy Depth to saturated zone Rock fragments	0.00 0.00 0.88
Flaming-----	8	Poor Too sandy Wind erosion Low content of organic matter Droughty	0.00 0.00 0.12 0.75	Fair Depth to saturated zone	0.88	Poor Too sandy Depth to saturated zone	0.00 0.88
Karlsruhe-----	5	Fair Low content of organic matter Carbonate content Droughty	0.12 0.68 0.90	Fair Depth to saturated zone	0.50	Fair Depth to saturated zone Hard to reclaim	0.50 0.68
Radium-----	3	Poor Too sandy Wind erosion Low content of organic matter Droughty	0.00 0.00 0.12 0.82	Good		Poor Too sandy Rock fragments	0.00 0.50
Strathcona-----	2	Fair Low content of organic matter Carbonate content Water erosion	0.12 0.92 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
Thiefriever-----	2	Fair Low content of organic matter Carbonate content	0.12 0.68	Poor Depth to saturated zone Low strength Shrink-swell	0.00 0.00 0.82	Poor Depth to saturated zone	0.00

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I65A: Ulen-----	70	Poor Wind erosion Too sandy Low content of organic matter Carbonate content Droughty	 0.00 0.16 0.50 0.68 0.93	Fair Depth to saturated zone	 0.50	Fair Too sandy Depth to saturated zone Carbonate content	 0.16 0.50 0.68
Rosewood-----	10	Poor Too sandy Low content of organic matter Carbonate content	 0.00 0.12 0.68	Poor Depth to saturated zone	 0.00	Poor Too sandy Depth to saturated zone Rock fragments	 0.00 0.00 0.88
Flaming-----	6	Poor Too sandy Wind erosion Low content of organic matter Droughty	 0.00 0.00 0.12 0.75	Fair Depth to saturated zone	 0.88	Poor Too sandy Depth to saturated zone	 0.00 0.88
Poppleton-----	4	Poor Too sandy Wind erosion Low content of organic matter Droughty	 0.00 0.00 0.12 0.81	Fair Depth to saturated zone	 0.88	Poor Too sandy Depth to saturated zone	 0.00 0.88
Karlsruhe-----	3	Fair Low content of organic matter Carbonate content Droughty	 0.12 0.68 0.90	Fair Depth to saturated zone	 0.50	Fair Depth to saturated zone Hard to reclaim	 0.50 0.68
Radium-----	3	Poor Too sandy Wind erosion Low content of organic matter Droughty	 0.00 0.00 0.12 0.82	Good		Poor Too sandy Rock fragments	 0.00 0.50
Strathcona-----	2	Fair Low content of organic matter Carbonate content Water erosion	 0.12 0.92 0.99	Poor Depth to saturated zone Low strength	 0.00 0.22	Poor Depth to saturated zone	 0.00
Thiefriever-----	2	Fair Low content of organic matter Carbonate content	 0.12 0.68	Poor Depth to saturated zone Low strength Shrink-swell	 0.00 0.00 0.82	Poor Depth to saturated zone	 0.00

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I66A: Vallers-----	75	Fair Low content of organic matter Carbonate content Water erosion	0.12 0.68 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
Vallers, very cobbly	7	Fair Low content of organic matter Carbonate content Water erosion	0.12 0.68 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
Hamerly-----	6	Fair Low content of organic matter Carbonate content Water erosion	0.12 0.68 0.99	Fair Depth to saturated zone Low strength	0.06 0.22	Fair Depth to saturated zone Carbonate content	0.06 0.68
Grimstad-----	3	Fair Low content of organic matter Too sandy Carbonate content Water erosion	0.12 0.16 0.92 0.99	Fair Depth to saturated zone Low strength	0.12 0.22	Fair Depth to saturated zone Too sandy Carbonate content	0.12 0.16 0.92
Mavie-----	3	Poor Too sandy Low content of organic matter Carbonate content Water erosion	0.00 0.12 0.68 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Too sandy Depth to saturated zone Rock fragments Carbonate content	0.00 0.00 0.00 0.97
Roliss, depressional	3	Fair Low content of organic matter Water erosion	0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
Strathcona-----	3	Fair Low content of organic matter Carbonate content Water erosion	0.12 0.92 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
I67A: Wheatville-----	70	Fair Low content of organic matter Carbonate content Water erosion	0.12 0.32 0.90	Poor Low strength Depth to saturated zone Shrink-swell	0.00 0.06 0.80	Fair Depth to saturated zone Carbonate content	0.06 0.32
Augsburg-----	13	Fair Low content of organic matter Too sandy Carbonate content	0.12 0.13 0.32	Poor Depth to saturated zone Low strength Shrink-swell	0.00 0.00 0.84	Poor Depth to saturated zone Too sandy	0.00 0.13

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>I67A:</b>							
Glyndon-----	8	Fair Low content of organic matter Carbonate content	0.12 0.32	Poor Depth to saturated zone	0.00	Poor Depth to saturated zone Carbonate content	0.00 0.32
Foxlake-----	5	Poor Too clayey Low content of organic matter	0.00 0.12	Poor Depth to saturated zone Low strength Shrink-swell	0.00 0.00 0.00 0.38	Poor Depth to saturated zone Too clayey	0.00 0.00 0.00
Hilaire-----	2	Poor Too sandy Wind erosion Low content of organic matter	0.00 0.00 0.12	Poor Low strength Shrink-swell Depth to saturated zone	0.00 0.86 0.88	Poor Too sandy Depth to saturated zone Rock fragments	0.00 0.88 0.97
Ulen-----	2	Poor Wind erosion Too sandy Low content of organic matter Carbonate content Droughty	0.00 0.16 0.50 0.68 0.93	Fair Depth to saturated zone	0.50	Fair Too sandy Depth to saturated zone Carbonate content	0.16 0.50 0.68
<b>I68A:</b>							
Wheatville-----	70	Fair Low content of organic matter Carbonate content Water erosion	0.12 0.32 0.90	Poor Low strength Depth to saturated zone Shrink-swell	0.00 0.06 0.80	Fair Depth to saturated zone Carbonate content	0.06 0.32
Augsburg-----	13	Fair Low content of organic matter Too sandy Carbonate content	0.12 0.13 0.32	Poor Depth to saturated zone Low strength Shrink-swell	0.00 0.00 0.84	Poor Depth to saturated zone Too sandy	0.00 0.13
Glyndon-----	8	Fair Low content of organic matter Carbonate content	0.12 0.32	Poor Depth to saturated zone	0.00	Poor Depth to saturated zone Carbonate content	0.00 0.32
Foxlake-----	5	Poor Too clayey Low content of organic matter	0.00 0.12	Poor Depth to saturated zone Low strength Shrink-swell	0.00 0.00 0.38	Poor Depth to saturated zone Too clayey	0.00 0.00
Hilaire-----	2	Poor Too sandy Wind erosion Low content of organic matter	0.00 0.00 0.12	Poor Low strength Shrink-swell Depth to saturated zone	0.00 0.86 0.88	Poor Too sandy Depth to saturated zone Rock fragments	0.00 0.88 0.97

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I68A: Ulen-----	2	Poor Wind erosion Too sandy Low content of organic matter Carbonate content Droughty	 0.00 0.16 0.50 0.68 0.93	Fair Depth to saturated zone	 0.50	Fair Too sandy Depth to saturated zone Carbonate content	 0.16 0.50 0.68
I69A: Wyandotte-----	65	Fair Low content of organic matter Too sandy Carbonate content	 0.12 0.32 0.92	Poor Depth to saturated zone Low strength Shrink-swell	 0.00 0.00 0.86	Poor Depth to saturated zone Rock fragments Too sandy	 0.00 0.00 0.32
Foxlake-----	10	Poor Too clayey Low content of organic matter	 0.00 0.12	Poor Depth to saturated zone Low strength Shrink-swell	 0.00 0.00 0.38	Poor Depth to saturated zone Too clayey	 0.00 0.00
Espelie-----	8	Poor Too clayey Low content of organic matter	 0.00 0.12	Poor Depth to saturated zone Low strength Shrink-swell	 0.00 0.00 0.57	Poor Depth to saturated zone Too clayey	 0.00 0.00
Clearwater, depressional-----	5	Poor Too clayey Low content of organic matter	 0.00 0.12	Poor Depth to saturated zone Low strength Shrink-swell	 0.00 0.00 0.12	Poor Depth to saturated zone Too clayey	 0.00 0.00
Thiefriver-----	5	Fair Low content of organic matter Carbonate content	 0.12 0.68	Poor Depth to saturated zone Low strength Shrink-swell	 0.00 0.00 0.82	Poor Depth to saturated zone	 0.00
Karlsruhe-----	4	Fair Low content of organic matter Carbonate content Droughty	 0.12 0.68 0.90	Fair Depth to saturated zone	 0.50	Fair Depth to saturated zone Hard to reclaim	 0.50 0.68
Syrene-----	3	Fair Low content of organic matter Droughty Too sandy Carbonate content	 0.12 0.17 0.22 0.68	Poor Depth to saturated zone	 0.00	Poor Depth to saturated zone Rock fragments Too sandy Hard to reclaim	 0.00 0.00 0.22 0.68

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I70A: Strathcona-----	70	Fair Low content of organic matter Carbonate content Water erosion	0.12 0.92 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
Kratka-----	10	Fair Low content of organic matter Water erosion	0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
Roliss-----	6	Fair Low content of organic matter Water erosion	0.12 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
Grimstad-----	5	Fair Low content of organic matter Too sandy Carbonate content Water erosion	0.12 0.16 0.92 0.99	Fair Depth to saturated zone Low strength	0.12 0.22	Fair Depth to saturated zone Too sandy Carbonate content	0.12 0.16 0.92
Mavie-----	3	Poor Too sandy Low content of organic matter Carbonate content Water erosion	0.00 0.12 0.68 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Too sandy Depth to saturated zone Rock fragments Carbonate content	0.00 0.00 0.00 0.97
Rosewood-----	3	Poor Too sandy Low content of organic matter Carbonate content	0.00 0.12 0.68	Poor Depth to saturated zone	0.00	Poor Too sandy Depth to saturated zone Rock fragments	0.00 0.00 0.88
Strathcona, depressional-----	3	Fair Low content of organic matter Carbonate content Water erosion	0.12 0.92 0.99	Poor Depth to saturated zone Low strength	0.00 0.22	Poor Depth to saturated zone	0.00
M-W: Miscellaneous water	100	Not rated		Not rated		Not rated	
W: Water-----	100	Not rated		Not rated		Not rated	

Table 21.--Water Management

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. "Not rated" indicates that data are not available or that no rating is applicable. See text for further explanation of ratings in this table)

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>E109A:</b>							
Bowstring-----	45	Very limited Seepage	1.00	Very limited Content of organic matter Ponding Depth to saturated zone	1.00 1.00 1.00	Very limited Cutbanks cave	1.00
Fluvaquents-----	40	Very limited Seepage	1.00	Very limited Ponding Depth to saturated zone Seepage	1.00 1.00 0.03	Very limited Cutbanks cave	1.00
Hapludalfs-----	5	Very limited Seepage Slope	1.00 0.59	Somewhat limited Piping Depth to saturated zone	0.99 0.87	Somewhat limited Cutbanks cave Depth to water	0.10 0.06
Seelyeville-----	5	Very limited Seepage	1.00	Not rated		Somewhat limited Cutbanks cave	0.10
Water-----	5	Not rated		Not rated		Not rated	
<b>E200A:</b>							
Garnes-----	70	Somewhat limited Seepage	0.72	Somewhat limited Depth to saturated zone Piping	0.87 0.74	Somewhat limited Slow refill Cutbanks cave Depth to water	0.28 0.10 0.06
Chilgren-----	13	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Ponding Piping	1.00 1.00 0.78	Somewhat limited Cutbanks cave	0.10
Eckvoll-----	5	Very limited Seepage	1.00	Somewhat limited Depth to saturated zone Seepage	0.87 0.33	Very limited Cutbanks cave Slow refill Depth to water	1.00 0.28 0.06
Garnes, very stony--	5	Somewhat limited Seepage	0.72	Somewhat limited Depth to saturated zone Piping	0.87 0.73	Somewhat limited Slow refill Cutbanks cave Depth to water	0.28 0.10 0.06
Grygla-----	4	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping Seepage	1.00 1.00 0.98 0.16	Very limited Cutbanks cave	1.00

Table 21.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>B200A:</b>							
Pelan-----	3	Very limited Seepage	1.00	Somewhat limited Piping Depth to saturated zone Seepage	0.98 0.87 0.01	Very limited Cutbanks cave Slow refill Depth to water	1.00 0.28 0.06
<b>B201A:</b>							
Chilgren-----	75	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Ponding Piping	1.00 1.00 0.78	Somewhat limited Cutbanks cave	0.10
Garnes-----	9	Somewhat limited Seepage	0.72	Somewhat limited Depth to saturated zone Piping	0.87 0.74	Somewhat limited Slow refill Cutbanks cave Depth to water	0.28 0.10 0.06
Grygla-----	5	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping Seepage	1.00 1.00 0.98 0.16	Very limited Cutbanks cave	1.00
Grygla, depressiona	5	Very limited Seepage	1.00	Very limited Ponding Depth to saturated zone Piping Seepage	1.00 1.00 0.98 0.16	Very limited Cutbanks cave	1.00
Hamre-----	5	Somewhat limited Seepage	0.72	Very limited Ponding Depth to saturated zone Piping	1.00 1.00 0.87	Somewhat limited Cutbanks cave	0.10
Pelan-----	1	Very limited Seepage	1.00	Somewhat limited Piping Depth to saturated zone Seepage	0.98 0.87 0.01	Very limited Cutbanks cave Slow refill Depth to water	1.00 0.28 0.06
<b>B202A:</b>							
Cathro-----	80	Very limited Seepage	1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Somewhat limited Cutbanks cave	0.10
Hamre-----	8	Somewhat limited Seepage	0.72	Very limited Ponding Depth to saturated zone Piping	1.00 1.00 0.87	Somewhat limited Cutbanks cave	0.10

Table 21.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>E202A:</b>							
Chilgren-----	3	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Ponding Piping	1.00 1.00 0.78	Somewhat limited Cutbanks cave	0.10
Northwood-----	3	Very limited Seepage	1.00	Very limited Ponding Depth to saturated zone Seepage	1.00 1.00 0.16	Very limited Cutbanks cave	1.00
Berner-----	2	Very limited Seepage	1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Cutbanks cave	1.00
Grygla-----	2	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping Seepage	1.00 1.00 0.98 0.16	Very limited Cutbanks cave	1.00
Seelyeville-----	2	Very limited Seepage	1.00	Not rated		Somewhat limited Cutbanks cave	0.10
<b>E203A:</b>							
Northwood-----	75	Very limited Seepage	1.00	Very limited Ponding Depth to saturated zone Seepage	1.00 1.00 0.16	Very limited Cutbanks cave	1.00
Hamre-----	10	Somewhat limited Seepage	0.72	Very limited Ponding Depth to saturated zone Piping	1.00 1.00 0.87	Somewhat limited Cutbanks cave	0.10
Grygla-----	7	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping Seepage	1.00 1.00 0.98 0.16	Very limited Cutbanks cave	1.00
Berner-----	5	Very limited Seepage	1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Cutbanks cave	1.00
Chilgren-----	3	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Ponding Piping	1.00 1.00 0.78	Somewhat limited Cutbanks cave	0.10

Table 21.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>B204A:</b>							
Roliss-----	75	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Ponding Piping	1.00 1.00 0.50	Somewhat limited Slow refill Cutbanks cave	0.28 0.10
Grygla-----	8	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping Seepage	1.00 1.00 0.98 0.16	Very limited Cutbanks cave	1.00
Chilgren-----	5	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Ponding Piping	1.00 1.00 0.78	Somewhat limited Cutbanks cave	0.10
Garnes-----	5	Somewhat limited Seepage	0.72	Somewhat limited Depth to saturated zone Piping	0.87 0.74	Somewhat limited Slow refill Cutbanks cave Depth to water	0.28 0.10 0.06
Roliss, depressiona	5	Somewhat limited Seepage	0.72	Very limited Ponding Depth to saturated zone Piping	1.00 1.00 0.50	Somewhat limited Slow refill Cutbanks cave	0.28 0.10
Hamre-----	2	Somewhat limited Seepage	0.72	Very limited Ponding Depth to saturated zone Piping	1.00 1.00 0.87	Somewhat limited Cutbanks cave	0.10
<b>B205A:</b>							
Berner-----	80	Very limited Seepage	1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Cutbanks cave	1.00
Northwood-----	7	Very limited Seepage	1.00	Very limited Ponding Depth to saturated zone Seepage	1.00 1.00 0.16	Very limited Cutbanks cave	1.00
Grygla-----	5	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping Seepage	1.00 1.00 0.98 0.16	Very limited Cutbanks cave	1.00

Table 21.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
B205A: Cathro-----	3	Very limited Seepage	1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Somewhat limited Cutbanks cave	0.10
Hamre-----	3	Somewhat limited Seepage	0.72	Very limited Ponding Depth to saturated zone Piping	1.00 1.00 0.87	Somewhat limited Cutbanks cave	0.10
Seelyeville-----	2	Very limited Seepage	1.00	Not rated		Somewhat limited Cutbanks cave	0.10
B206A: Hamre-----	80	Somewhat limited Seepage	0.72	Very limited Ponding Depth to saturated zone Piping	1.00 1.00 0.87	Somewhat limited Cutbanks cave	0.10
Chilgren-----	8	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Ponding Piping	1.00 1.00 0.78	Somewhat limited Cutbanks cave	0.10
Northwood-----	5	Very limited Seepage	1.00	Very limited Ponding Depth to saturated zone Seepage	1.00 1.00 0.16	Very limited Cutbanks cave	1.00
Cathro-----	3	Very limited Seepage	1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Somewhat limited Cutbanks cave	0.10
Grygla-----	2	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping Seepage	1.00 1.00 0.98 0.16	Very limited Cutbanks cave	1.00
Roliss-----	2	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Ponding Piping	1.00 1.00 0.50	Somewhat limited Slow refill Cutbanks cave	0.28 0.10
I1A: Augsburg-----	75	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping	1.00 1.00 0.05	Very limited Cutbanks cave	1.00

Table 21.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>I1A:</b>							
Borup-----	10	Very limited Seepage	1.00	Very limited Depth to saturated zone Piping Ponding	1.00 1.00 1.00	Somewhat limited Cutbanks cave	0.10
Foxlake-----	5	Not limited		Very limited Depth to saturated zone Ponding Hard to pack	1.00 1.00 0.41	Somewhat limited Cutbanks cave	0.10
Augsburg, depressional-----	3	Very limited Seepage	1.00	Very limited Ponding Depth to saturated zone Piping	1.00 1.00 0.05	Somewhat limited Cutbanks cave	0.10
Wheatville-----	3	Very limited Seepage	1.00	Very limited Depth to saturated zone	1.00	Somewhat limited Cutbanks cave	0.10
Glyndon-----	2	Very limited Seepage	1.00	Very limited Depth to saturated zone Piping	1.00 1.00	Very limited Cutbanks cave	1.00
Espelie-----	1	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.13	Very limited Cutbanks cave	1.00
Hattie-----	1	Not limited		Somewhat limited Depth to saturated zone Hard to pack	0.99 0.88	Very limited Slow refill Cutbanks cave Depth to water	1.00 0.10 0.01
<b>I2A:</b>							
Augsburg-----	75	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping	1.00 1.00 0.05	Very limited Cutbanks cave	1.00
Borup-----	10	Very limited Seepage	1.00	Very limited Depth to saturated zone Piping Ponding	1.00 1.00 1.00	Somewhat limited Cutbanks cave	0.10
Foxlake-----	5	Not limited		Very limited Depth to saturated zone Ponding Hard to pack	1.00 1.00 0.41	Somewhat limited Cutbanks cave	0.10

Table 21.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I2A: Augsburg, depressional-----	3	Very limited Seepage	1.00	Very limited Ponding Depth to saturated zone Piping	1.00 1.00 0.05	Somewhat limited Cutbanks cave	0.10
Wheatville-----	3	Very limited Seepage	1.00	Very limited Depth to saturated zone	1.00	Somewhat limited Cutbanks cave	0.10
Glyndon-----	2	Very limited Seepage	1.00	Very limited Depth to saturated zone Piping	1.00 1.00	Very limited Cutbanks cave	1.00
Espelie-----	1	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.13	Very limited Cutbanks cave	1.00
Hattie-----	1	Not limited		Somewhat limited Depth to saturated zone Hard to pack	0.99 0.88	Very limited Slow refill Cutbanks cave Depth to water	1.00 0.10 0.01
I3A: Berner-----	80	Very limited Seepage	1.00	Not rated		Very limited Cutbanks cave	1.00
Northwood-----	7	Very limited Seepage	1.00	Very limited Ponding Depth to saturated zone Seepage	1.00 1.00 0.13	Very limited Cutbanks cave	1.00
Kratka-----	5	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping Seepage	1.00 1.00 0.97 0.01	Very limited Cutbanks cave	1.00
Hamre-----	3	Somewhat limited Seepage	0.72	Very limited Ponding Depth to saturated zone Piping	1.00 1.00 0.87	Somewhat limited Cutbanks cave	0.10
Strathcona-----	3	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping Seepage	1.00 1.00 0.98 0.25	Very limited Cutbanks cave	1.00
Seelyeville-----	2	Very limited Seepage	1.00	Not rated		Somewhat limited Cutbanks cave	0.10

Table 21.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I4A: Bernier-----	30	Very limited Seepage	1.00	Not rated		Very limited Cutbanks cave	1.00
Rosewood, depressional-----	30	Very limited Seepage	1.00	Very limited Ponding Depth to saturated zone Seepage	1.00 1.00 0.25	Very limited Cutbanks cave	1.00
Strathcona, depressional-----	30	Very limited Seepage	1.00	Very limited Ponding Depth to saturated zone Piping Seepage	1.00 1.00 0.98 0.25	Very limited Cutbanks cave	1.00
Rosewood-----	4	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.25	Very limited Cutbanks cave	1.00
Deerwood-----	2	Very limited Seepage	1.00	Not rated		Very limited Cutbanks cave	1.00
Mavie-----	2	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.61	Very limited Cutbanks cave	1.00
Strathcona-----	2	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping Seepage	1.00 1.00 0.98 0.25	Very limited Cutbanks cave	1.00
I5A: Borup-----	75	Very limited Seepage	1.00	Very limited Depth to saturated zone Piping Ponding	1.00 1.00 1.00	Somewhat limited Cutbanks cave	0.10
Glyndon-----	9	Very limited Seepage	1.00	Very limited Depth to saturated zone Piping	1.00 1.00	Very limited Cutbanks cave	1.00
Rosewood-----	8	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.25	Very limited Cutbanks cave	1.00

Table 21.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I5A: Augsburg-----	5	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping	1.00 1.00 0.05	Very limited Cutbanks cave	1.00
Augsburg, depressional-----	3	Very limited Seepage	1.00	Very limited Ponding Depth to saturated zone Piping	1.00 1.00 0.05	Somewhat limited Cutbanks cave	0.10
I6A: Borup-----	75	Very limited Seepage	1.00	Very limited Depth to saturated zone Piping Ponding	1.00 1.00 1.00	Somewhat limited Cutbanks cave	0.10
Glyndon-----	9	Very limited Seepage	1.00	Very limited Depth to saturated zone Piping	1.00 1.00	Very limited Cutbanks cave	1.00
Rosewood-----	8	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.25	Very limited Cutbanks cave	1.00
Augsburg-----	5	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping	1.00 1.00 0.05	Very limited Cutbanks cave	1.00
Augsburg, depressional-----	3	Very limited Seepage	1.00	Very limited Ponding Depth to saturated zone Piping	1.00 1.00 0.05	Somewhat limited Cutbanks cave	0.10
I7A: Bowstring-----	45	Very limited Seepage	1.00	Not rated		Very limited Cutbanks cave	1.00
Fluvaquents-----	45	Very limited Seepage	1.00	Very limited Ponding Depth to saturated zone Seepage	1.00 1.00 0.03	Very limited Cutbanks cave	1.00
Hapludolls-----	5	Somewhat limited Seepage Slope	0.72 0.01	Very limited Piping	1.00	Very limited Depth to water	1.00
Water-----	5	Not rated		Not rated		Not rated	

Table 21.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I8A: Cathro-----	80	Very limited Seepage	1.00	Not rated		Somewhat limited Cutbanks cave	0.10
Hamre-----	8	Somewhat limited Seepage	0.72	Very limited Ponding Depth to saturated zone Piping	1.00 1.00 0.87	Somewhat limited Cutbanks cave	0.10
Northwood-----	3	Very limited Seepage	1.00	Very limited Ponding Depth to saturated zone Seepage	1.00 1.00 0.13	Very limited Cutbanks cave	1.00
Roliss-----	3	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Ponding Piping	1.00 1.00 0.50	Somewhat limited Slow refill Cutbanks cave	0.28 0.10
Berner-----	2	Very limited Seepage	1.00	Not rated		Very limited Cutbanks cave	1.00
Kratka-----	2	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping Seepage	1.00 1.00 0.97 0.01	Very limited Cutbanks cave	1.00
Seelyeville-----	2	Very limited Seepage	1.00	Not rated		Somewhat limited Cutbanks cave	0.10
I9A: Clearwater-----	80	Not limited		Very limited Depth to saturated zone Ponding Hard to pack	1.00 1.00 0.88	Very limited Slow refill Cutbanks cave	1.00 0.10
Clearwater, very cobbly-----	5	Not limited		Very limited Depth to saturated zone Ponding Hard to pack	1.00 1.00 0.88	Very limited Slow refill Cutbanks cave	1.00 0.10
Reis-----	5	Not limited		Very limited Depth to saturated zone Hard to pack	1.00 0.88	Very limited Slow refill Cutbanks cave	1.00 0.10

Table 21.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I9A: Clearwater, depressional-----	3	Not limited		Very limited Ponding Depth to saturated zone Hard to pack	1.00 1.00 0.76	Somewhat limited Slow refill Cutbanks cave	0.46 0.10
Espelie-----	3	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.13	Very limited Cutbanks cave	1.00
Foxlake-----	2	Not limited		Very limited Depth to saturated zone Ponding Hard to pack	1.00 1.00 0.41	Somewhat limited Cutbanks cave	0.10
Hattie-----	1	Not limited		Somewhat limited Depth to saturated zone Hard to pack	0.99 0.88	Very limited Slow refill Cutbanks cave Depth to water	1.00 0.10 0.01
Huot-----	1	Very limited Seepage	1.00	Somewhat limited Depth to saturated zone Seepage	0.87 0.01	Very limited Cutbanks cave Depth to water	1.00 0.06
I10A: Clearwater, depressional-----	85	Not limited		Very limited Ponding Depth to saturated zone Hard to pack	1.00 1.00 0.76	Somewhat limited Slow refill Cutbanks cave	0.46 0.10
Clearwater-----	9	Not limited		Very limited Depth to saturated zone Ponding Hard to pack	1.00 1.00 0.88	Very limited Slow refill Cutbanks cave	1.00 0.10
Augsburg, depressional-----	3	Very limited Seepage	1.00	Very limited Ponding Depth to saturated zone Piping	1.00 1.00 0.05	Somewhat limited Cutbanks cave	0.10
Reis-----	2	Not limited		Very limited Depth to saturated zone Hard to pack	1.00 0.88	Very limited Slow refill Cutbanks cave	1.00 0.10

Table 21.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I10A: Espelie-----	1	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.13	Very limited Cutbanks cave	1.00
I11A: Deerwood-----	85	Very limited Seepage	1.00	Not rated		Very limited Cutbanks cave	1.00
Rosewood-----	6	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.25	Very limited Cutbanks cave	1.00
Markey-----	3	Very limited Seepage	1.00	Not rated		Very limited Cutbanks cave	1.00
Strathcona-----	2	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping Seepage	1.00 1.00 0.98 0.25	Very limited Cutbanks cave	1.00
Syrene-----	2	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.22	Very limited Cutbanks cave	1.00
Venlo-----	2	Very limited Seepage	1.00	Very limited Ponding Depth to saturated zone Seepage	1.00 1.00 0.25	Very limited Cutbanks cave	1.00
I12A: Eckvoll-----	70	Very limited Seepage	1.00	Somewhat limited Depth to saturated zone Seepage	0.87 0.25	Very limited Cutbanks cave Slow refill Depth to water	1.00 0.28 0.06
Kratka-----	8	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping Seepage	1.00 1.00 0.97 0.01	Very limited Cutbanks cave	1.00
Smiley-----	7	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Ponding Piping	1.00 1.00 0.71	Somewhat limited Slow refill Cutbanks cave	0.28 0.10

Table 21.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I12A:							
Linveltdt-----	5	Very limited Seepage	1.00	Somewhat limited Piping Depth to saturated zone	0.99 0.87	Very limited Cutbanks cave Slow refill Depth to water	1.00 0.28 0.06
Reiner-----	5	Somewhat limited Seepage	0.72	Somewhat limited Depth to saturated zone Piping	0.87 0.66	Somewhat limited Slow refill Cutbanks cave Depth to water	0.28 0.10 0.06
Foldahl-----	2	Very limited Seepage	1.00	Somewhat limited Depth to saturated zone Seepage	0.87 0.25	Very limited Cutbanks cave Depth to water	1.00 0.06
Pelan-----	2	Very limited Seepage	1.00	Somewhat limited Piping Depth to saturated zone Seepage	0.98 0.87 0.51	Very limited Cutbanks cave Slow refill Depth to water	1.00 0.28 0.06
Poppleton-----	1	Very limited Seepage	1.00	Somewhat limited Depth to saturated zone Seepage	0.87 0.25	Very limited Cutbanks cave Depth to water	1.00 0.06
I13A:							
Espelie-----	75	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.13	Very limited Cutbanks cave	1.00
Foxlake-----	8	Not limited		Very limited Depth to saturated zone Ponding Hard to pack	1.00 1.00 0.41	Somewhat limited Cutbanks cave	0.10
Hilaire-----	7	Very limited Seepage	1.00	Somewhat limited Depth to saturated zone Seepage	0.87 0.25	Very limited Cutbanks cave Depth to water	1.00 0.06
Clearwater, depressional-----	5	Not limited		Very limited Ponding Depth to saturated zone Hard to pack	1.00 1.00 0.76	Somewhat limited Slow refill Cutbanks cave	0.46 0.10
Thiefriver-----	5	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.01	Very limited Cutbanks cave	1.00

Table 21.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>I14B:</b>							
Fairdale-----	85	Somewhat limited Seepage	0.72	Very limited Piping Depth to saturated zone	1.00 0.87	Somewhat limited Slow refill Cutbanks cave Depth to water	0.28 0.10 0.06
Fluvaquents-----	6	Very limited Seepage	1.00	Very limited Ponding Depth to saturated zone Seepage	1.00 1.00 0.03	Very limited Cutbanks cave	1.00
Hapludolls-----	5	Somewhat limited Seepage Slope	0.72 0.01	Very limited Piping	1.00	Very limited Depth to water	1.00
Hapludalfs-----	2	Very limited Seepage Slope	1.00 0.59	Somewhat limited Piping Depth to saturated zone	0.99 0.87	Somewhat limited Cutbanks cave Depth to water	0.10 0.06
Zell-----	2	Very limited Seepage Slope	1.00 0.01	Very limited Piping	1.00	Very limited Depth to water	1.00
<b>I14D:</b>							
Fairdale-----	85	Somewhat limited Seepage Slope	0.72 0.01	Very limited Piping Depth to saturated zone	1.00 0.87	Somewhat limited Slow refill Cutbanks cave Depth to water	0.28 0.10 0.06
Fluvaquents-----	6	Very limited Seepage	1.00	Very limited Ponding Depth to saturated zone Seepage	1.00 1.00 0.03	Very limited Cutbanks cave	1.00
Hapludolls-----	4	Somewhat limited Seepage Slope	0.72 0.01	Very limited Piping	1.00	Very limited Depth to water	1.00
Zell-----	3	Very limited Seepage Slope	1.00 0.01	Very limited Piping	1.00	Very limited Depth to water	1.00
Hapludalfs-----	2	Very limited Seepage Slope	1.00 0.59	Somewhat limited Piping Depth to saturated zone	0.99 0.87	Somewhat limited Cutbanks cave Depth to water	0.10 0.06
<b>I15A:</b>							
Flaming-----	70	Very limited Seepage	1.00	Somewhat limited Depth to saturated zone Seepage	0.87 0.25	Very limited Cutbanks cave Depth to water	1.00 0.06

Table 21.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I15A: Garborg-----	10	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.25	Very limited Cutbanks cave	1.00
Hamar-----	5	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.25	Very limited Cutbanks cave	1.00
Ulen-----	5	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.25	Very limited Cutbanks cave	1.00
Poppleton-----	3	Very limited Seepage	1.00	Somewhat limited Depth to saturated zone Seepage	0.87 0.25	Very limited Cutbanks cave Depth to water	1.00 0.06
Sandberg-----	3	Very limited Seepage	1.00	Somewhat limited Seepage	0.51	Very limited Depth to water	1.00
Foldahl-----	2	Very limited Seepage	1.00	Somewhat limited Depth to saturated zone Seepage	0.87 0.25	Very limited Cutbanks cave Depth to water	1.00 0.06
Radium-----	2	Very limited Seepage	1.00	Somewhat limited Seepage Depth to saturated zone	0.79 0.50	Very limited Cutbanks cave Depth to water	1.00 0.22
I16F: Fluvaquents-----	55	Very limited Seepage	1.00	Very limited Ponding Depth to saturated zone Seepage	1.00 1.00 0.03	Very limited Cutbanks cave	1.00
Hapludolls-----	25	Somewhat limited Seepage Slope	0.72 0.01	Very limited Piping	1.00	Very limited Depth to water	1.00
Hapludalfs-----	7	Very limited Seepage Slope	1.00 0.59	Somewhat limited Piping Depth to saturated zone	0.99 0.87	Somewhat limited Cutbanks cave Depth to water	0.10 0.06
Fairdale-----	5	Somewhat limited Seepage Slope	0.72 0.01	Very limited Piping Depth to saturated zone	1.00 0.87	Somewhat limited Slow refill Cutbanks cave Depth to water	0.28 0.10 0.06
Water-----	5	Not rated		Not rated		Not rated	

Table 21.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I16F: Bowstring-----	2	Very limited Seepage	1.00	Not rated		Very limited Cutbanks cave	1.00
Rauville-----	1	Very limited Seepage	1.00	Very limited Ponding Depth to saturated zone Piping Seepage	1.00 1.00 0.80 0.01	Very limited Cutbanks cave	1.00
I17A: Foldahl-----	75	Very limited Seepage	1.00	Very limited Piping Depth to saturated zone Seepage	1.00 0.87 0.25	Very limited Cutbanks cave Depth to water	1.00 0.06
Kratka-----	10	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping Seepage	1.00 1.00 0.97 0.01	Very limited Cutbanks cave	1.00
Roliss-----	5	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Ponding Piping	1.00 1.00 0.50	Somewhat limited Slow refill Cutbanks cave	0.28 0.10
Flaming-----	4	Very limited Seepage	1.00	Somewhat limited Depth to saturated zone Seepage	0.87 0.25	Very limited Cutbanks cave Depth to water	1.00 0.06
Grimstad-----	2	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.05	Very limited Cutbanks cave	1.00
Linveltd-----	2	Very limited Seepage	1.00	Somewhat limited Piping Depth to saturated zone	0.99 0.87	Very limited Cutbanks cave Slow refill Depth to water	1.00 0.28 0.06
Eckvoll-----	1	Very limited Seepage	1.00	Somewhat limited Depth to saturated zone Seepage	0.87 0.25	Very limited Cutbanks cave Slow refill Depth to water	1.00 0.28 0.06
Strathcona-----	1	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping Seepage	1.00 1.00 0.98 0.25	Very limited Cutbanks cave	1.00

Table 21.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I18A: Foldahl-----	75	Very limited Seepage	1.00	Somewhat limited Depth to saturated zone Seepage	0.87 0.25	Very limited Cutbanks cave Depth to water	1.00 0.06
Kratka-----	10	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping Seepage	1.00 1.00 0.97 0.01	Very limited Cutbanks cave	1.00
Roliss-----	5	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Ponding Piping	1.00 1.00 0.50	Somewhat limited Slow refill Cutbanks cave	0.28 0.10
Flaming-----	4	Very limited Seepage	1.00	Somewhat limited Depth to saturated zone Seepage	0.87 0.25	Very limited Cutbanks cave Depth to water	1.00 0.06
Grimstad-----	2	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.05	Very limited Cutbanks cave	1.00
Linveltd-----	2	Very limited Seepage	1.00	Somewhat limited Piping Depth to saturated zone	0.99 0.87	Very limited Cutbanks cave Slow refill Depth to water	1.00 0.28 0.06
Eckvoll-----	1	Very limited Seepage	1.00	Somewhat limited Depth to saturated zone Seepage	0.87 0.25	Very limited Cutbanks cave Slow refill Depth to water	1.00 0.28 0.06
Strathcona-----	1	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping Seepage	1.00 1.00 0.98 0.25	Very limited Cutbanks cave	1.00
I19A: Foxhome-----	65	Very limited Seepage	1.00	Somewhat limited Piping Depth to saturated zone Seepage	0.96 0.87 0.03	Very limited Cutbanks cave Slow refill Depth to water	1.00 0.28 0.06
Kittson-----	10	Somewhat limited Seepage	0.72	Somewhat limited Depth to saturated zone Piping	0.87 0.78	Somewhat limited Slow refill Cutbanks cave Depth to water	0.28 0.10 0.06

Table 21.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I19A: Strandquist-----	10	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping Seepage	1.00 1.00 0.97 0.68	Very limited Cutbanks cave	1.00
Foldahl-----	5	Very limited Seepage	1.00	Very limited Piping Depth to saturated zone Seepage	1.00 0.87 0.25	Very limited Cutbanks cave Depth to water	1.00 0.06
Grimstad-----	5	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.05	Very limited Cutbanks cave	1.00
Roliss-----	3	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Ponding Piping	1.00 1.00 0.50	Somewhat limited Slow refill Cutbanks cave	0.28 0.10
Mavie-----	2	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.61	Very limited Cutbanks cave	1.00
I20A: Foxlake-----	75	Not limited		Very limited Depth to saturated zone Ponding Hard to pack	1.00 1.00 0.41	Somewhat limited Cutbanks cave	0.10
Clearwater-----	5	Not limited		Very limited Depth to saturated zone Ponding Hard to pack	1.00 1.00 0.88	Very limited Slow refill Cutbanks cave	1.00 0.10
Foxlake, very cobbly	5	Not limited		Very limited Depth to saturated zone Ponding Hard to pack	1.00 1.00 0.41	Somewhat limited Cutbanks cave	0.10
Augsburg-----	3	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping	1.00 1.00 0.05	Very limited Cutbanks cave	1.00

Table 21.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I20A: Clearwater, depressional-----	3	Not limited		Very limited Ponding Depth to saturated zone Hard to pack	1.00 1.00 0.76	Somewhat limited Slow refill Cutbanks cave	0.46 0.10
Espelie-----	3	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.13	Very limited Cutbanks cave	1.00
Hilaire-----	2	Very limited Seepage	1.00	Somewhat limited Depth to saturated zone Seepage	0.87 0.25	Very limited Cutbanks cave Depth to water	1.00 0.06
Reis-----	2	Not limited		Very limited Depth to saturated zone Hard to pack	1.00 0.88	Very limited Slow refill Cutbanks cave	1.00 0.10
Wheatville-----	2	Very limited Seepage	1.00	Very limited Depth to saturated zone	1.00	Somewhat limited Cutbanks cave	0.10
I21A: Fram-----	85	Somewhat limited Seepage	0.72	Very limited Piping Depth to saturated zone	1.00 0.87	Somewhat limited Slow refill Cutbanks cave Depth to water	0.28 0.10 0.06
Hedman-----	12	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Piping Ponding	1.00 1.00 1.00	Somewhat limited Slow refill Cutbanks cave	0.28 0.10
Strathcona-----	2	Very limited Seepage	1.00	Very limited Depth to saturated zone Piping Ponding Seepage	1.00 1.00 1.00 0.25	Very limited Cutbanks cave	1.00
Foxhome-----	1	Very limited Seepage	1.00	Very limited Piping Depth to saturated zone Seepage	1.00 0.87 0.03	Very limited Cutbanks cave Slow refill Depth to water	1.00 0.28 0.06
I22A: Glyndon-----	75	Very limited Seepage	1.00	Very limited Depth to saturated zone Piping	1.00 1.00	Very limited Cutbanks cave	1.00

Table 21.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I22A:							
Borup-----	10	Very limited Seepage	1.00	Very limited Depth to saturated zone Piping Ponding	1.00 1.00 1.00	Somewhat limited Cutbanks cave	0.10
Augsburg-----	5	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping	1.00 1.00 0.05	Somewhat limited Cutbanks cave	0.10
Ulen-----	5	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.25	Very limited Cutbanks cave	1.00
Wheatville-----	3	Very limited Seepage	1.00	Very limited Depth to saturated zone	1.00	Somewhat limited Cutbanks cave	0.10
Flaming-----	2	Very limited Seepage	1.00	Somewhat limited Depth to saturated zone Seepage	0.87 0.25	Very limited Cutbanks cave Depth to water	1.00 0.06
I23A:							
Glyndon-----	75	Very limited Seepage	1.00	Very limited Depth to saturated zone Piping	1.00 1.00	Very limited Cutbanks cave	1.00
Borup-----	10	Very limited Seepage	1.00	Very limited Depth to saturated zone Piping Ponding	1.00 1.00 1.00	Somewhat limited Cutbanks cave	0.10
Augsburg-----	5	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Ponding Piping	1.00 1.00 0.05	Very limited Cutbanks cave Slow refill	1.00 0.28
Ulen-----	5	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.25	Very limited Cutbanks cave	1.00
Wheatville-----	3	Very limited Seepage	1.00	Very limited Depth to saturated zone	1.00	Somewhat limited Cutbanks cave	0.10
Flaming-----	2	Very limited Seepage	1.00	Somewhat limited Depth to saturated zone Seepage	0.87 0.25	Very limited Cutbanks cave Depth to water	1.00 0.06

Table 21.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I24A: Grimstad-----	70	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.05	Very limited Cutbanks cave	1.00
Strathcona-----	12	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping Seepage	1.00 1.00 0.98 0.25	Very limited Cutbanks cave	1.00
Foldahl-----	5	Very limited Seepage	1.00	Very limited Piping Depth to saturated zone Seepage	1.00 0.87 0.25	Very limited Cutbanks cave Depth to water	1.00 0.06
Hamerly-----	5	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Piping	1.00 0.62	Somewhat limited Slow refill Cutbanks cave	0.28 0.10
Foxhome-----	2	Very limited Seepage	1.00	Somewhat limited Piping Depth to saturated zone Seepage	0.96 0.87 0.03	Very limited Cutbanks cave Slow refill Depth to water	1.00 0.28 0.06
Karlsruhe-----	2	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.54	Very limited Cutbanks cave	1.00
Mavie-----	2	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.61	Very limited Cutbanks cave	1.00
Ulen-----	2	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.25	Very limited Cutbanks cave	1.00
I25A: Hamar-----	75	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.25	Very limited Cutbanks cave	1.00
Garborg-----	10	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.25	Very limited Cutbanks cave	1.00

Table 21.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I25A:							
Rosewood-----	7	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.25	Very limited Cutbanks cave	1.00
Venlo-----	3	Very limited Seepage	1.00	Very limited Ponding Depth to saturated zone Seepage	1.00 1.00 0.25	Very limited Cutbanks cave	1.00
Flaming-----	2	Very limited Seepage	1.00	Somewhat limited Depth to saturated zone Seepage	0.87 0.25	Very limited Cutbanks cave Depth to water	1.00 0.06
Hangaard-----	2	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.51	Very limited Cutbanks cave	1.00
Kratka-----	1	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping Seepage	1.00 1.00 0.97 0.01	Very limited Cutbanks cave	1.00
I26A:							
Hamerly-----	75	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Piping	1.00 0.62	Somewhat limited Slow refill Cutbanks cave	0.28 0.10
Vallers-----	12	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Ponding Piping	1.00 1.00 0.68	Somewhat limited Slow refill Cutbanks cave	0.28 0.10
Foxhome-----	3	Very limited Seepage	1.00	Somewhat limited Piping Depth to saturated zone Seepage	0.96 0.87 0.03	Very limited Cutbanks cave Slow refill Depth to water	1.00 0.28 0.06
Grimstad-----	3	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.05	Very limited Cutbanks cave	1.00
Hamerly, very cobbly	3	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Piping	1.00 0.62	Somewhat limited Slow refill Cutbanks cave	0.28 0.10

Table 21.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I26A: Strathcona-----	3	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping Seepage	1.00 1.00 0.98 0.25	Very limited Cutbanks cave	1.00
Roliss, depressional	1	Somewhat limited Seepage	0.72	Very limited Ponding Depth to saturated zone Piping	1.00 1.00 0.50	Somewhat limited Slow refill Cutbanks cave	0.28 0.10
I27A: Hamre-----	80	Somewhat limited Seepage	0.72	Very limited Ponding Depth to saturated zone Piping	1.00 1.00 0.87	Somewhat limited Cutbanks cave	0.10
Northwood-----	5	Very limited Seepage	1.00	Very limited Ponding Depth to saturated zone Seepage	1.00 1.00 0.13	Very limited Cutbanks cave	1.00
Roliss-----	5	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Ponding Piping	1.00 1.00 0.50	Somewhat limited Slow refill Cutbanks cave	0.28 0.10
Smiley-----	5	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Ponding Piping	1.00 1.00 0.71	Somewhat limited Slow refill Cutbanks cave	0.28 0.10
Cathro-----	3	Very limited Seepage	1.00	Not rated		Somewhat limited Cutbanks cave	0.10
Kratka-----	2	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping Seepage	1.00 1.00 0.97 0.01	Very limited Cutbanks cave	1.00
I28A: Hangaard-----	75	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.51	Very limited Cutbanks cave	1.00

Table 21.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I28A:							
Hamar-----	7	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.25	Very limited Cutbanks cave	1.00
Syrene-----	7	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.22	Very limited Cutbanks cave	1.00
Karlsruhe-----	3	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.54	Very limited Cutbanks cave	1.00
Rosewood-----	3	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.25	Very limited Cutbanks cave	1.00
Strandquist-----	3	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping Seepage	1.00 1.00 0.97 0.68	Very limited Cutbanks cave	1.00
Deerwood-----	2	Very limited Seepage	1.00	Not rated		Very limited Cutbanks cave	1.00
I29A:							
Hattie-----	75	Not limited		Somewhat limited Depth to saturated zone Hard to pack	0.99 0.88	Very limited Slow refill Cutbanks cave Depth to water	1.00 0.10 0.01
Clearwater-----	12	Not limited		Very limited Depth to saturated zone Ponding Hard to pack	1.00 1.00 0.88	Very limited Slow refill Cutbanks cave	1.00 0.10
Reis-----	6	Not limited		Very limited Depth to saturated zone Hard to pack	1.00 0.88	Very limited Slow refill Cutbanks cave	1.00 0.10
Hattie, very cobbly	5	Not limited		Somewhat limited Depth to saturated zone Hard to pack	0.99 0.88	Very limited Slow refill Cutbanks cave Depth to water	1.00 0.10 0.01
Hilaire-----	2	Very limited Seepage	1.00	Somewhat limited Depth to saturated zone Seepage	0.87 0.25	Very limited Cutbanks cave Depth to water	1.00 0.06

Table 21.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I29D:							
Hattie-----	85	Somewhat limited Slope	0.01	Somewhat limited Depth to saturated zone Hard to pack	0.99 0.88	Very limited Slow refill Cutbanks cave Depth to water	1.00 0.10 0.01
Clearwater-----	6	Not limited		Very limited Depth to saturated zone Ponding Hard to pack	1.00 1.00 0.88	Very limited Slow refill Cutbanks cave	1.00 0.10
Hattie, level-----	5	Not limited		Somewhat limited Depth to saturated zone Hard to pack	0.99 0.88	Very limited Slow refill Cutbanks cave Depth to water	1.00 0.10 0.01
Boyerlake-----	4	Not limited		Somewhat limited Depth to saturated zone Hard to pack	0.99 0.88	Very limited Slow refill Cutbanks cave Depth to water	1.00 0.10 0.01
I30A:							
Hedman-----	85	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Piping Ponding	1.00 1.00 1.00	Somewhat limited Slow refill Cutbanks cave	0.28 0.10
Fram-----	5	Somewhat limited Seepage	0.72	Very limited Piping Depth to saturated zone	1.00 0.87	Somewhat limited Slow refill Cutbanks cave Depth to water	0.28 0.10 0.06
Strathcona-----	5	Very limited Seepage	1.00	Very limited Depth to saturated zone Piping Ponding Seepage	1.00 1.00 1.00 0.25	Very limited Cutbanks cave	1.00
Haug-----	3	Somewhat limited Seepage	0.72	Not rated		Somewhat limited Cutbanks cave	0.10
Strandquist-----	2	Very limited Seepage	1.00	Very limited Depth to saturated zone Piping Ponding Seepage	1.00 1.00 1.00 0.68	Very limited Cutbanks cave	1.00
I31A:							
Hedman-----	50	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Piping Ponding	1.00 1.00 1.00	Somewhat limited Slow refill Cutbanks cave	0.28 0.10

Table 21.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I31A:							
Fram-----	40	Somewhat limited Seepage	0.72	Very limited Piping Depth to saturated zone	1.00 0.87	Somewhat limited Slow refill Cutbanks cave Depth to water	0.28 0.10 0.06
Strathcona-----	5	Very limited Seepage	1.00	Very limited Depth to saturated zone Piping Ponding Seepage	1.00 1.00 1.00 0.25	Very limited Cutbanks cave	1.00
Haug-----	3	Somewhat limited Seepage	0.72	Not rated		Somewhat limited Cutbanks cave	0.10
Strandquist-----	2	Very limited Seepage	1.00	Very limited Depth to saturated zone Piping Ponding Seepage	1.00 1.00 1.00 0.68	Very limited Cutbanks cave	1.00
I32A:							
Hilaire-----	75	Very limited Seepage	1.00	Somewhat limited Depth to saturated zone Seepage	0.87 0.25	Very limited Cutbanks cave Depth to water	1.00 0.06
Espelie-----	12	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.13	Very limited Cutbanks cave	1.00
Huot-----	5	Very limited Seepage	1.00	Somewhat limited Depth to saturated zone Seepage	0.87 0.01	Very limited Cutbanks cave Depth to water	1.00 0.06
Flaming-----	2	Very limited Seepage	1.00	Somewhat limited Depth to saturated zone Seepage	0.87 0.25	Very limited Cutbanks cave Depth to water	1.00 0.06
Foxlake-----	2	Not limited		Very limited Depth to saturated zone Ponding Hard to pack	1.00 1.00 0.41	Somewhat limited Cutbanks cave	0.10
Wheatville-----	2	Very limited Seepage	1.00	Very limited Depth to saturated zone	1.00	Somewhat limited Cutbanks cave	0.10

Table 21.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I32A: Thiefriver-----	1	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.01	Very limited Cutbanks cave	1.00
Wyandotte-----	1	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage Piping	1.00 1.00 0.25 0.10	Very limited Cutbanks cave	1.00
I33A: Hilaire-----	75	Very limited Seepage	1.00	Somewhat limited Depth to saturated zone Seepage	0.87 0.25	Very limited Cutbanks cave Depth to water	1.00 0.06
Espelie-----	12	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.13	Very limited Cutbanks cave	1.00
Huot-----	5	Very limited Seepage	1.00	Somewhat limited Depth to saturated zone Seepage	0.87 0.01	Very limited Cutbanks cave Depth to water	1.00 0.06
Flaming-----	2	Very limited Seepage	1.00	Somewhat limited Depth to saturated zone Seepage	0.87 0.25	Very limited Cutbanks cave Depth to water	1.00 0.06
Foxlake-----	2	Not limited		Very limited Depth to saturated zone Ponding Hard to pack	1.00 1.00 0.41	Somewhat limited Cutbanks cave	0.10
Wheatville-----	2	Very limited Seepage	1.00	Very limited Depth to saturated zone	1.00	Somewhat limited Cutbanks cave	0.10
Thiefriver-----	1	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.01	Very limited Cutbanks cave	1.00
Wyandotte-----	1	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage Piping	1.00 1.00 0.25 0.10	Very limited Cutbanks cave	1.00

Table 21.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>I34A:</b>							
Huot-----	75	Very limited Seepage	1.00	Somewhat limited Depth to saturated zone Seepage	0.87 0.01	Very limited Cutbanks cave Depth to water	1.00 0.06
Thiefriver-----	12	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.01	Very limited Cutbanks cave	1.00
Hilaire-----	5	Very limited Seepage	1.00	Somewhat limited Depth to saturated zone Seepage	0.87 0.25	Very limited Cutbanks cave Depth to water	1.00 0.06
Flaming-----	3	Very limited Seepage	1.00	Somewhat limited Depth to saturated zone Seepage	0.87 0.25	Very limited Cutbanks cave Depth to water	1.00 0.06
Foxlake-----	3	Not limited		Very limited Depth to saturated zone Ponding Hard to pack	1.00 1.00 0.41	Somewhat limited Cutbanks cave	0.10
Ulen-----	2	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.25	Very limited Cutbanks cave	1.00
<b>I35A:</b>							
Karlsruhe-----	70	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.54	Very limited Cutbanks cave	1.00
Syrene-----	10	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.22	Very limited Cutbanks cave	1.00
Ulen-----	10	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.25	Very limited Cutbanks cave	1.00
Radium-----	5	Very limited Seepage	1.00	Somewhat limited Seepage Depth to saturated zone	0.79 0.50	Very limited Cutbanks cave Depth to water	1.00 0.22

Table 21.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I35A: Rosewood-----	3	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.25	Very limited Cutbanks cave	1.00
Sandberg-----	2	Very limited Seepage	1.00	Somewhat limited Seepage	0.51	Very limited Depth to water	1.00
I36A: Kittson-----	70	Somewhat limited Seepage	0.72	Somewhat limited Depth to saturated zone Piping	0.87 0.78	Somewhat limited Slow refill Cutbanks cave Depth to water	0.28 0.10 0.06
Roliss-----	12	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Ponding Piping	1.00 1.00 0.50	Somewhat limited Slow refill Cutbanks cave	0.28 0.10
Hamerly-----	5	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Piping	1.00 0.62	Somewhat limited Slow refill Cutbanks cave	0.28 0.10
Kratka-----	5	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping Seepage	1.00 1.00 0.97 0.01	Very limited Cutbanks cave	1.00
Grimstad-----	3	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.05	Very limited Cutbanks cave	1.00
Strandquist-----	3	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping Seepage	1.00 1.00 0.97 0.68	Very limited Cutbanks cave	1.00
Foxhome-----	2	Very limited Seepage	1.00	Somewhat limited Piping Depth to saturated zone Seepage	0.96 0.87 0.03	Very limited Cutbanks cave Slow refill Depth to water	1.00 0.28 0.06

Table 21.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I37A: Kratka, depressional	45	Very limited Seepage	1.00	Very limited Ponding Depth to saturated zone Piping Seepage	1.00 1.00 0.97 0.01	Very limited Cutbanks cave	1.00
Strathcona, depressional-----	45	Very limited Seepage	1.00	Very limited Ponding Depth to saturated zone Piping Seepage	1.00 1.00 0.98 0.25	Very limited Cutbanks cave	1.00
Northwood-----	5	Very limited Seepage	1.00	Very limited Ponding Depth to saturated zone Seepage	1.00 1.00 0.13	Very limited Cutbanks cave	1.00
Kratka-----	2	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping Seepage	1.00 1.00 0.97 0.01	Very limited Cutbanks cave	1.00
Strathcona-----	2	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping Seepage	1.00 1.00 0.98 0.25	Very limited Cutbanks cave	1.00
Roliss-----	1	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Ponding Piping	1.00 1.00 0.50	Somewhat limited Slow refill Cutbanks cave	0.28 0.10
I38A: Kratka-----	70	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping Seepage	1.00 1.00 0.97 0.01	Very limited Cutbanks cave	1.00
Smiley-----	7	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Ponding Piping	1.00 1.00 0.71	Somewhat limited Slow refill Cutbanks cave	0.28 0.10

Table 21.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I38A: Foldahl-----	5	Very limited Seepage	1.00	Very limited Piping Depth to saturated zone Seepage	1.00 0.87 0.25	Very limited Cutbanks cave Depth to water	1.00 0.06
Kratka, very cobbly	5	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping Seepage	1.00 1.00 0.97 0.01	Very limited Cutbanks cave	1.00
Strathcona-----	5	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping Seepage	1.00 1.00 0.98 0.25	Very limited Cutbanks cave	1.00
Kratka, depressional	3	Very limited Seepage	1.00	Very limited Ponding Depth to saturated zone Piping Seepage	1.00 1.00 0.97 0.01	Very limited Cutbanks cave	1.00
Strandquist-----	3	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping Seepage	1.00 1.00 0.97 0.68	Very limited Cutbanks cave	1.00
Linveldt-----	2	Very limited Seepage	1.00	Somewhat limited Piping Depth to saturated zone	0.99 0.87	Very limited Cutbanks cave Slow refill Depth to water	1.00 0.28 0.06
I39A: Linveldt-----	65	Very limited Seepage	1.00	Somewhat limited Piping Depth to saturated zone	0.99 0.87	Very limited Cutbanks cave Slow refill Depth to water	1.00 0.28 0.06
Kratka-----	14	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping Seepage	1.00 1.00 0.97 0.01	Very limited Cutbanks cave	1.00
Reiner-----	10	Somewhat limited Seepage	0.72	Somewhat limited Depth to saturated zone Piping	0.87 0.66	Somewhat limited Slow refill Cutbanks cave Depth to water	0.28 0.10 0.06

Table 21.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I39A:							
Smiley-----	5	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Ponding Piping	1.00 1.00 0.71	Somewhat limited Slow refill Cutbanks cave	0.28 0.10
Eckvoll-----	3	Very limited Seepage	1.00	Somewhat limited Depth to saturated zone Seepage	0.87 0.25	Very limited Cutbanks cave Slow refill Depth to water	1.00 0.28 0.06
Foldahl-----	2	Very limited Seepage	1.00	Very limited Piping Depth to saturated zone Seepage	1.00 0.87 0.25	Very limited Cutbanks cave Depth to water	1.00 0.06
Pelan-----	1	Very limited Seepage	1.00	Somewhat limited Piping Depth to saturated zone Seepage	0.98 0.87 0.51	Very limited Cutbanks cave Slow refill Depth to water	1.00 0.28 0.06
I40B:							
Maddock-----	85	Very limited Seepage	1.00	Somewhat limited Seepage	0.25	Very limited Depth to water	1.00
Flaming-----	5	Very limited Seepage	1.00	Somewhat limited Depth to saturated zone Seepage	0.87 0.25	Very limited Cutbanks cave Depth to water	1.00 0.06
Sandberg-----	5	Very limited Seepage	1.00	Somewhat limited Seepage	0.51	Very limited Depth to water	1.00
Halverson-----	3	Very limited Seepage	1.00	Very limited Piping Seepage	1.00 0.02	Very limited Depth to water	1.00
Hamar-----	2	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.25	Very limited Cutbanks cave	1.00
I40F:							
Maddock-----	90	Very limited Seepage Slope	1.00 0.15	Somewhat limited Seepage	0.25	Very limited Depth to water	1.00
Flaming-----	5	Very limited Seepage	1.00	Somewhat limited Depth to saturated zone Seepage	0.87 0.25	Very limited Cutbanks cave Depth to water	1.00 0.06
Sandberg-----	5	Very limited Seepage	1.00	Somewhat limited Seepage	0.51	Very limited Depth to water	1.00

Table 21.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I41A:							
Markey-----	80	Very limited Seepage	1.00	Not rated		Very limited Cutbanks cave	1.00
Deerwood-----	12	Very limited Seepage	1.00	Not rated		Very limited Cutbanks cave	1.00
Berner-----	2	Very limited Seepage	1.00	Not rated		Very limited Cutbanks cave	1.00
Hamar-----	2	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.25	Very limited Cutbanks cave	1.00
Seelyeville-----	2	Very limited Seepage	1.00	Not rated		Somewhat limited Cutbanks cave	0.10
Syrene-----	2	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.22	Very limited Cutbanks cave	1.00
I42A:							
Markey, ponded-----	85	Very limited Seepage	1.00	Not rated		Very limited Cutbanks cave	1.00
Markey-----	5	Very limited Seepage	1.00	Not rated		Very limited Cutbanks cave	1.00
Deerwood-----	4	Very limited Seepage	1.00	Not rated		Very limited Cutbanks cave	1.00
Seelyeville, ponded	4	Very limited Seepage	1.00	Not rated		Somewhat limited Cutbanks cave	0.10
Hamar-----	1	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.25	Very limited Cutbanks cave	1.00
Hangaard-----	1	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.51	Very limited Cutbanks cave	1.00
I43A:							
Mavie-----	70	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.61	Very limited Cutbanks cave	1.00

Table 21.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I43A:							
Vallers-----	10	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Ponding Piping	1.00 1.00 0.68	Somewhat limited Slow refill Cutbanks cave	0.28 0.10
Strandquist-----	7	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping Seepage	1.00 1.00 0.97 0.68	Very limited Cutbanks cave	1.00
Strathcona-----	5	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping Seepage	1.00 1.00 0.98 0.25	Very limited Cutbanks cave	1.00
Strathcona, depressional-----	3	Very limited Seepage	1.00	Very limited Ponding Depth to saturated zone Piping Seepage	1.00 1.00 0.98 0.25	Very limited Cutbanks cave	1.00
Foxhome-----	2	Very limited Seepage	1.00	Somewhat limited Piping Depth to saturated zone Seepage	0.96 0.87 0.03	Very limited Cutbanks cave Slow refill Depth to water	1.00 0.28 0.06
Karlsruhe-----	2	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.54	Very limited Cutbanks cave	1.00
Grimstad-----	1	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.05	Very limited Cutbanks cave	1.00
I44A:							
Newfolden-----	75	Somewhat limited Seepage	0.72	Somewhat limited Depth to saturated zone Piping	0.87 0.48	Somewhat limited Slow refill Cutbanks cave Depth to water	0.28 0.10 0.06
Smiley-----	12	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Ponding Piping	1.00 1.00 0.71	Somewhat limited Slow refill Cutbanks cave	0.28 0.10

Table 21.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I44A:							
Boash-----	8	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Ponding	1.00 1.00	Somewhat limited Slow refill Cutbanks cave	0.28 0.10
Linveldt-----	4	Very limited Seepage	1.00	Somewhat limited Piping Depth to saturated zone	0.99 0.87	Very limited Cutbanks cave Slow refill Depth to water	1.00 0.28 0.06
Hapludolls-----	1	Somewhat limited Seepage Slope	0.72 0.01	Very limited Piping	1.00	Very limited Depth to water	1.00
I45A:							
Northwood-----	75	Very limited Seepage	1.00	Very limited Ponding Depth to saturated zone Seepage	1.00 1.00 0.13	Very limited Cutbanks cave	1.00
Hamre-----	10	Somewhat limited Seepage	0.72	Very limited Ponding Depth to saturated zone Piping	1.00 1.00 0.87	Somewhat limited Cutbanks cave	0.10
Berner-----	5	Very limited Seepage	1.00	Not rated		Very limited Cutbanks cave	1.00
Kratka-----	5	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping Seepage	1.00 1.00 0.97 0.01	Very limited Cutbanks cave	1.00
Strandquist-----	3	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping Seepage	1.00 1.00 0.97 0.68	Very limited Cutbanks cave	1.00
Roliss-----	2	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Ponding Piping	1.00 1.00 0.50	Somewhat limited Slow refill Cutbanks cave	0.28 0.10
I46A:							
Pits-----	85	Not rated		Not rated		Not rated	
Udipsamments-----	10	Very limited Seepage Slope	1.00 0.32	Somewhat limited Seepage	0.79	Very limited Depth to water	1.00

Table 21.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I46A:							
Radium-----	2	Very limited Seepage	1.00	Somewhat limited Seepage Depth to saturated zone	0.79 0.50	Very limited Cutbanks cave Depth to water	1.00 0.22
Maddock-----	1	Very limited Seepage	1.00	Somewhat limited Seepage	0.25	Very limited Depth to water	1.00
Marquette-----	1	Very limited Seepage	1.00	Somewhat limited Seepage	0.07	Very limited Depth to water	1.00
Sandberg-----	1	Very limited Seepage	1.00	Somewhat limited Seepage	0.51	Very limited Depth to water	1.00
I47A:							
Poppleton-----	75	Very limited Seepage	1.00	Somewhat limited Depth to saturated zone Seepage	0.87 0.25	Very limited Cutbanks cave Depth to water	1.00 0.06
Flaming-----	12	Very limited Seepage	1.00	Somewhat limited Depth to saturated zone Seepage	0.87 0.25	Very limited Cutbanks cave Depth to water	1.00 0.06
Garborg-----	5	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.25	Very limited Cutbanks cave	1.00
Hamar-----	3	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.25	Very limited Cutbanks cave	1.00
Radium-----	2	Very limited Seepage	1.00	Somewhat limited Seepage Depth to saturated zone	0.79 0.50	Very limited Cutbanks cave Depth to water	1.00 0.22
Ulen-----	2	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.25	Very limited Cutbanks cave	1.00
Maddock-----	1	Very limited Seepage	1.00	Somewhat limited Seepage	0.25	Very limited Depth to water	1.00
I48A:							
Radium-----	75	Very limited Seepage	1.00	Somewhat limited Seepage Depth to saturated zone	0.79 0.50	Very limited Cutbanks cave Depth to water	1.00 0.22

Table 21.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I48A: Sandberg-----	7	Very limited Seepage	1.00	Somewhat limited Seepage	0.51	Very limited Depth to water	1.00
Oylen-----	5	Very limited Seepage	1.00	Somewhat limited Seepage Depth to saturated zone	0.72 0.50	Very limited Cutbanks cave Depth to water	1.00 0.22
Flaming-----	4	Very limited Seepage	1.00	Somewhat limited Depth to saturated zone Seepage	0.87 0.25	Very limited Cutbanks cave Depth to water	1.00 0.06
Garborg-----	3	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.25	Very limited Cutbanks cave	1.00
Hangaard-----	3	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.51	Very limited Cutbanks cave	1.00
Hamar-----	2	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.25	Very limited Cutbanks cave	1.00
Poppleton-----	1	Very limited Seepage	1.00	Somewhat limited Depth to saturated zone Seepage	0.87 0.25	Very limited Cutbanks cave Depth to water	1.00 0.06
I49A: Rauville-----	80	Very limited Seepage	1.00	Very limited Ponding Depth to saturated zone Piping Seepage	1.00 1.00 0.80 0.01	Very limited Cutbanks cave	1.00
Fluvaquents-----	12	Very limited Seepage	1.00	Very limited Ponding Depth to saturated zone Seepage	1.00 1.00 0.03	Very limited Cutbanks cave	1.00
Water-----	5	Not rated		Not rated		Not rated	
Lamoure-----	3	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping Seepage	1.00 1.00 0.62 0.03	Very limited Cutbanks cave	1.00

Table 21.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>I50A:</b>							
Reiner-----	70	Somewhat limited Seepage	0.72	Somewhat limited Depth to saturated zone Piping	0.87 0.66	Somewhat limited Slow refill Cutbanks cave Depth to water	0.28 0.10 0.06
Smiley-----	12	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Ponding Piping	1.00 1.00 0.71	Somewhat limited Slow refill Cutbanks cave	0.28 0.10
Reiner, very cobbly	7	Somewhat limited Seepage	0.72	Somewhat limited Depth to saturated zone Piping	0.87 0.66	Somewhat limited Slow refill Cutbanks cave Depth to water	0.28 0.10 0.06
Linveltdt-----	5	Very limited Seepage	1.00	Somewhat limited Piping Depth to saturated zone	0.99 0.87	Very limited Cutbanks cave Slow refill Depth to water	1.00 0.28 0.06
Eckvoll-----	3	Very limited Seepage	1.00	Somewhat limited Depth to saturated zone Seepage	0.87 0.25	Very limited Cutbanks cave Slow refill Depth to water	1.00 0.28 0.06
Kratka-----	3	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping Seepage	1.00 1.00 0.97 0.01	Very limited Cutbanks cave	1.00
<b>I51A:</b>							
Reiner-----	65	Somewhat limited Seepage	0.72	Somewhat limited Depth to saturated zone Piping	0.87 0.70	Somewhat limited Slow refill Cutbanks cave Depth to water	0.28 0.10 0.06
Smiley-----	9	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Ponding Piping	1.00 1.00 0.71	Somewhat limited Slow refill Cutbanks cave	0.28 0.10
Reiner fine sandy loam-----	8	Somewhat limited Seepage	0.72	Somewhat limited Depth to saturated zone Piping	0.87 0.66	Somewhat limited Slow refill Cutbanks cave Depth to water	0.28 0.10 0.06
Linveltdt-----	7	Very limited Seepage	1.00	Somewhat limited Piping Depth to saturated zone	0.99 0.87	Very limited Cutbanks cave Slow refill Depth to water	1.00 0.28 0.06

Table 21.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I51A: Kratka-----	5	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping Seepage	1.00 1.00 0.97 0.01	Very limited Cutbanks cave	1.00
Eckvoll-----	3	Very limited Seepage	1.00	Somewhat limited Depth to saturated zone Seepage	0.87 0.25	Very limited Cutbanks cave Slow refill Depth to water	1.00 0.28 0.06
Reiner, very cobbly	3	Somewhat limited Seepage	0.72	Somewhat limited Depth to saturated zone Piping	0.87 0.66	Somewhat limited Slow refill Cutbanks cave Depth to water	0.28 0.10 0.06
I52A: Reis-----	55	Not limited		Very limited Depth to saturated zone Hard to pack	1.00 0.88	Very limited Slow refill Cutbanks cave	1.00 0.10
Clearwater-----	30	Not limited		Very limited Depth to saturated zone Ponding Hard to pack	1.00 1.00 0.88	Very limited Slow refill Cutbanks cave	1.00 0.10
Clearwater, very cobbly-----	5	Not limited		Very limited Depth to saturated zone Ponding Hard to pack	1.00 1.00 0.88	Very limited Slow refill Cutbanks cave	1.00 0.10
Clearwater, depressional-----	3	Not limited		Very limited Ponding Depth to saturated zone Hard to pack	1.00 1.00 0.76	Somewhat limited Slow refill Cutbanks cave	0.46 0.10
Espelie-----	3	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.13	Very limited Cutbanks cave	1.00
Hattie-----	3	Not limited		Somewhat limited Depth to saturated zone Hard to pack	0.99 0.88	Very limited Slow refill Cutbanks cave Depth to water	1.00 0.10 0.01

Table 21.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I52A: Wyandotte-----	1	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage Piping	1.00 1.00 0.25 0.10	Very limited Cutbanks cave	1.00
I53A: Roliss-----	75	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Ponding Piping	1.00 1.00 0.50	Somewhat limited Slow refill Cutbanks cave	0.28 0.10
Kratka-----	8	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping Seepage	1.00 1.00 0.97 0.01	Very limited Cutbanks cave	1.00
Roliss, very cobbly	7	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Ponding Piping	1.00 1.00 0.50	Somewhat limited Slow refill Cutbanks cave	0.28 0.10
Kittson-----	5	Somewhat limited Seepage	0.72	Somewhat limited Depth to saturated zone Piping	0.87 0.78	Somewhat limited Slow refill Cutbanks cave Depth to water	0.28 0.10 0.06
Roliss, depressiona	3	Somewhat limited Seepage	0.72	Very limited Ponding Depth to saturated zone Piping	1.00 1.00 0.50	Somewhat limited Slow refill Cutbanks cave	0.28 0.10
Smiley-----	2	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Ponding Piping	1.00 1.00 0.71	Somewhat limited Slow refill Cutbanks cave	0.28 0.10
I54A: Roliss, depressiona	80	Somewhat limited Seepage	0.72	Very limited Ponding Depth to saturated zone Piping	1.00 1.00 0.50	Somewhat limited Slow refill Cutbanks cave	0.28 0.10
Roliss-----	12	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Ponding Piping	1.00 1.00 0.50	Somewhat limited Slow refill Cutbanks cave	0.28 0.10

Table 21.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I54A: Hamre-----	5	Somewhat limited Seepage	0.72	Very limited Ponding Depth to saturated zone Piping	1.00 1.00 0.87	Somewhat limited Cutbanks cave	0.10
Kratka-----	3	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping Seepage	1.00 1.00 0.97 0.01	Very limited Cutbanks cave	1.00
I55A: Rosewood-----	75	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.25	Very limited Cutbanks cave	1.00
Ulen-----	10	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.25	Very limited Cutbanks cave	1.00
Hamar-----	6	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.25	Very limited Cutbanks cave	1.00
Rosewood, depressional-----	3	Very limited Seepage	1.00	Very limited Ponding Depth to saturated zone Seepage	1.00 1.00 0.25	Very limited Cutbanks cave	1.00
Syrene-----	3	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.22	Very limited Cutbanks cave	1.00
Karlsruhe-----	1	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.54	Very limited Cutbanks cave	1.00
Strathcona-----	1	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping Seepage	1.00 1.00 0.98 0.25	Very limited Cutbanks cave	1.00

Table 21.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I55A: Thiefriever-----	1	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.01	Very limited Cutbanks cave	1.00
I56A: Rosewood-----	50	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.25	Very limited Cutbanks cave	1.00
Venlo-----	40	Very limited Seepage	1.00	Very limited Ponding Depth to saturated zone Seepage	1.00 1.00 0.25	Very limited Cutbanks cave	1.00
Deerwood-----	3	Very limited Seepage	1.00	Not rated		Very limited Cutbanks cave	1.00
Syrene-----	3	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.22	Very limited Cutbanks cave	1.00
Ulen-----	2	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.25	Very limited Cutbanks cave	1.00
Strathcona-----	1	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping Seepage	1.00 1.00 0.98 0.25	Very limited Cutbanks cave	1.00
Thiefriever-----	1	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.01	Very limited Cutbanks cave	1.00
I57B: Sandberg-----	50	Very limited Seepage	1.00	Somewhat limited Seepage	0.51	Very limited Depth to water	1.00
Radium-----	25	Very limited Seepage	1.00	Somewhat limited Seepage Depth to saturated zone	0.79 0.50	Very limited Cutbanks cave Depth to water	1.00 0.22
Sioux-----	8	Very limited Seepage	1.00	Somewhat limited Seepage	0.64	Very limited Depth to water	1.00

Table 21.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I57B:							
Oylen-----	7	Very limited Seepage	1.00	Somewhat limited Seepage Depth to saturated zone	0.72 0.50	Very limited Cutbanks cave Depth to water	1.00 0.22
Flaming-----	5	Very limited Seepage	1.00	Somewhat limited Depth to saturated zone Seepage	0.87 0.25	Very limited Cutbanks cave Depth to water	1.00 0.06
Garborg-----	5	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.25	Very limited Cutbanks cave	1.00
I58A:							
Seelyeville-----	90	Very limited Seepage	1.00	Not rated		Somewhat limited Cutbanks cave	0.10
Cathro-----	3	Very limited Seepage	1.00	Not rated		Somewhat limited Cutbanks cave	0.10
Dora-----	3	Very limited Seepage	1.00	Not rated		Somewhat limited Cutbanks cave	0.10
Markey-----	3	Very limited Seepage	1.00	Not rated		Very limited Cutbanks cave	1.00
Berner-----	1	Very limited Seepage	1.00	Not rated		Very limited Cutbanks cave	1.00
I59A:							
Smiley-----	65	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Ponding Piping	1.00 1.00 0.71	Somewhat limited Slow refill Cutbanks cave	0.28 0.10
Smiley, very cobbly	10	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Ponding Piping	1.00 1.00 0.71	Somewhat limited Slow refill Cutbanks cave	0.28 0.10
Kratka-----	9	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping Seepage	1.00 1.00 0.97 0.01	Very limited Cutbanks cave	1.00
Roliss-----	5	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Ponding Piping	1.00 1.00 0.50	Somewhat limited Slow refill Cutbanks cave	0.28 0.10

Table 21.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>I59A:</b>							
Reiner-----	4	Somewhat limited Seepage	0.72	Somewhat limited Depth to saturated zone Piping	0.87 0.66	Somewhat limited Slow refill Cutbanks cave Depth to water	0.28 0.10 0.06
Linveltdt-----	3	Very limited Seepage	1.00	Somewhat limited Piping Depth to saturated zone	0.99 0.87	Very limited Cutbanks cave Slow refill Depth to water	1.00 0.28 0.06
Smiley, depressional	3	Somewhat limited Seepage	0.72	Very limited Ponding Depth to saturated zone Piping	1.00 1.00 0.50	Somewhat limited Slow refill Cutbanks cave	0.28 0.10
Strandquist-----	1	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping Seepage	1.00 1.00 0.97 0.68	Very limited Cutbanks cave	1.00
<b>I60A:</b>							
Smiley, depressional	80	Somewhat limited Seepage	0.72	Very limited Ponding Depth to saturated zone Piping	1.00 1.00 0.50	Somewhat limited Slow refill Cutbanks cave	0.28 0.10
Smiley-----	10	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Ponding Piping	1.00 1.00 0.71	Somewhat limited Slow refill Cutbanks cave	0.28 0.10
Hamre-----	5	Somewhat limited Seepage	0.72	Very limited Ponding Depth to saturated zone Piping	1.00 1.00 0.87	Somewhat limited Cutbanks cave	0.10
Kratka-----	5	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping Seepage	1.00 1.00 0.97 0.01	Very limited Cutbanks cave	1.00
<b>I61A:</b>							
Strandquist-----	70	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping Seepage	1.00 1.00 0.97 0.68	Very limited Cutbanks cave	1.00

Table 21.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I61A: Mavie-----	8	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.61	Very limited Cutbanks cave	1.00
Roliss-----	7	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Ponding Piping	1.00 1.00 0.50	Somewhat limited Slow refill Cutbanks cave	0.28 0.10
Kratka-----	5	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping Seepage	1.00 1.00 0.97 0.01	Very limited Cutbanks cave	1.00
Foxhome-----	4	Very limited Seepage	1.00	Somewhat limited Piping Depth to saturated zone Seepage	0.96 0.87 0.03	Very limited Cutbanks cave Slow refill Depth to water	1.00 0.28 0.06
Hangaard-----	3	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.51	Very limited Cutbanks cave	1.00
Northwood-----	3	Very limited Seepage	1.00	Very limited Ponding Depth to saturated zone Seepage	1.00 1.00 0.13	Very limited Cutbanks cave	1.00
I62A: Syrene-----	70	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.22	Very limited Cutbanks cave	1.00
Rosewood-----	11	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.25	Very limited Cutbanks cave	1.00
Hangaard-----	5	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.51	Very limited Cutbanks cave	1.00

Table 21.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I62A: Karlsruhe-----	4	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.54	Very limited Cutbanks cave	1.00
Deerwood-----	3	Very limited Seepage	1.00	Not rated		Very limited Cutbanks cave	1.00
Hamar-----	3	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.25	Very limited Cutbanks cave	1.00
Strandquist-----	2	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping Seepage	1.00 1.00 0.97 0.68	Very limited Cutbanks cave	1.00
Radium-----	1	Very limited Seepage	1.00	Somewhat limited Seepage Depth to saturated zone	0.79 0.50	Very limited Cutbanks cave Depth to water	1.00 0.22
Wyandotte-----	1	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage Piping	1.00 1.00 0.25 0.10	Very limited Cutbanks cave	1.00
I63A: Thiefriever-----	70	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.01	Very limited Cutbanks cave	1.00
Espelie-----	10	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.13	Very limited Cutbanks cave	1.00
Foxlake-----	7	Not limited		Very limited Depth to saturated zone Ponding Hard to pack	1.00 1.00 0.41	Somewhat limited Cutbanks cave	0.10
Huot-----	5	Very limited Seepage	1.00	Somewhat limited Depth to saturated zone Seepage	0.87 0.01	Very limited Cutbanks cave Depth to water	1.00 0.06

Table 21.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I63A: Clearwater, depressional-----	3	Not limited		Very limited Ponding Depth to saturated zone Hard to pack	1.00 1.00 0.76	Somewhat limited Slow refill Cutbanks cave	0.46 0.10
Rosewood-----	3	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.25	Very limited Cutbanks cave	1.00
Ulen-----	1	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.25	Very limited Cutbanks cave	1.00
Wyandotte-----	1	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage Piping	1.00 1.00 0.25 0.10	Very limited Cutbanks cave	1.00
I64A: Ulen-----	70	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.25	Very limited Cutbanks cave	1.00
Rosewood-----	10	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.25	Very limited Cutbanks cave	1.00
Flaming-----	8	Very limited Seepage	1.00	Somewhat limited Depth to saturated zone Seepage	0.87 0.25	Very limited Cutbanks cave Depth to water	1.00 0.06
Karlsruhe-----	5	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.54	Very limited Cutbanks cave	1.00
Radium-----	3	Very limited Seepage	1.00	Somewhat limited Seepage Depth to saturated zone	0.79 0.50	Very limited Cutbanks cave Depth to water	1.00 0.22
Strathcona-----	2	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping Seepage	1.00 1.00 0.98 0.25	Very limited Cutbanks cave	1.00

Table 21.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I64A: Thiefriever-----	2	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.01	Very limited Cutbanks cave	1.00
I65A: Ulen-----	70	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.25	Very limited Cutbanks cave	1.00
Rosewood-----	10	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.25	Very limited Cutbanks cave	1.00
Flaming-----	6	Very limited Seepage	1.00	Somewhat limited Depth to saturated zone Seepage	0.87 0.25	Very limited Cutbanks cave Depth to water	1.00 0.06
Poppleton-----	4	Very limited Seepage	1.00	Somewhat limited Depth to saturated zone Seepage	0.87 0.25	Very limited Cutbanks cave Depth to water	1.00 0.06
Karlsruhe-----	3	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.54	Very limited Cutbanks cave	1.00
Radium-----	3	Very limited Seepage	1.00	Somewhat limited Seepage Depth to saturated zone	0.79 0.50	Very limited Cutbanks cave Depth to water	1.00 0.22
Strathcona-----	2	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping Seepage	1.00 1.00 0.98 0.25	Very limited Cutbanks cave	1.00
Thiefriever-----	2	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.01	Very limited Cutbanks cave	1.00
I66A: Valliers-----	75	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Ponding Piping	1.00 1.00 0.68	Somewhat limited Slow refill Cutbanks cave	0.28 0.10

Table 21.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I66A: Vallers, very cobbly	7	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Ponding Piping	1.00 1.00 0.68	Somewhat limited Slow refill Cutbanks cave	0.28 0.10
Hamerly-----	6	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Piping	1.00 0.62	Somewhat limited Slow refill Cutbanks cave	0.28 0.10
Grimstad-----	3	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.05	Very limited Cutbanks cave	1.00
Mavie-----	3	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.61	Very limited Cutbanks cave	1.00
Roliss, depressional	3	Somewhat limited Seepage	0.72	Very limited Ponding Depth to saturated zone Piping	1.00 1.00 0.50	Somewhat limited Slow refill Cutbanks cave	0.28 0.10
Strathcona-----	3	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping Seepage	1.00 1.00 0.98 0.25	Very limited Cutbanks cave	1.00
I67A: Wheatville-----	70	Very limited Seepage	1.00	Very limited Depth to saturated zone	1.00	Somewhat limited Cutbanks cave	0.10
Augsburg-----	13	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping	1.00 1.00 0.05	Very limited Cutbanks cave	1.00
Glyndon-----	8	Very limited Seepage	1.00	Very limited Depth to saturated zone Piping	1.00 1.00	Very limited Cutbanks cave	1.00
Foxlake-----	5	Not limited		Very limited Depth to saturated zone Ponding Hard to pack	1.00 1.00 0.41	Somewhat limited Cutbanks cave	0.10

Table 21.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>I67A:</b>							
Hilaire-----	2	Very limited Seepage	1.00	Somewhat limited Depth to saturated zone Seepage	0.87 0.25	Very limited Cutbanks cave Depth to water	1.00 0.06
Ulen-----	2	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.25	Very limited Cutbanks cave	1.00
<b>I68A:</b>							
Wheatville-----	70	Very limited Seepage	1.00	Very limited Depth to saturated zone	1.00	Somewhat limited Cutbanks cave	0.10
Augsburg-----	13	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping	1.00 1.00 0.05	Very limited Cutbanks cave	1.00
Glyndon-----	8	Very limited Seepage	1.00	Very limited Depth to saturated zone Piping	1.00 1.00	Very limited Cutbanks cave	1.00
Foxlake-----	5	Not limited		Very limited Depth to saturated zone Ponding Hard to pack	1.00 1.00 0.41	Somewhat limited Cutbanks cave	0.10
Hilaire-----	2	Very limited Seepage	1.00	Somewhat limited Depth to saturated zone Seepage	0.87 0.25	Very limited Cutbanks cave Depth to water	1.00 0.06
Ulen-----	2	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.25	Very limited Cutbanks cave	1.00
<b>I69A:</b>							
Wyandotte-----	65	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage Piping	1.00 1.00 0.25 0.10	Very limited Cutbanks cave	1.00
Foxlake-----	10	Not limited		Very limited Depth to saturated zone Ponding Hard to pack	1.00 1.00 0.41	Somewhat limited Cutbanks cave	0.10

Table 21.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I69A: Espelie-----	8	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.13	Very limited Cutbanks cave	1.00
Clearwater, depressional-----	5	Not limited		Very limited Ponding Depth to saturated zone Hard to pack	1.00 1.00 0.76	Somewhat limited Slow refill Cutbanks cave	0.46 0.10
Thiefriver-----	5	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.01	Very limited Cutbanks cave	1.00
Karlsruhe-----	4	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.54	Very limited Cutbanks cave	1.00
Syrene-----	3	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.22	Very limited Cutbanks cave	1.00
I70A: Strathcona-----	70	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping Seepage	1.00 1.00 0.98 0.25	Very limited Cutbanks cave	1.00
Kratka-----	10	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Piping Seepage	1.00 1.00 0.97 0.01	Very limited Cutbanks cave	1.00
Roliss-----	6	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Ponding Piping	1.00 1.00 0.50	Somewhat limited Slow refill Cutbanks cave	0.28 0.10
Grimstad-----	5	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.05	Very limited Cutbanks cave	1.00

Table 21.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
I70A:							
Mavie-----	3	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.61	Very limited Cutbanks cave	1.00
Rosewood-----	3	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.25	Very limited Cutbanks cave	1.00
Strathcona, depressional-----	3	Very limited Seepage	1.00	Very limited Ponding Depth to saturated zone Piping Seepage	1.00 1.00 0.98 0.25	Very limited Cutbanks cave	1.00
M-W: Miscellaneous water	100	Not rated		Not rated		Not rated	
W: Water-----	100	Not rated		Not rated		Not rated	



# Soil Properties

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Data relating to soil properties are collected during the course of the soil survey. The data and the estimates of soil and water features, listed in tables, are explained on the following pages.

Soil properties are determined by field examination of the soils and by laboratory index testing of some benchmark soils. Established standard procedures are followed. During the survey, many shallow borings are made and examined to identify and classify the soils and to delineate them on the soil maps. Samples are taken from some typical profiles and tested in the laboratory to determine grain-size distribution, plasticity, and compaction characteristics.

Estimates of soil properties are based on field examinations, on laboratory tests of samples from the survey area, and on laboratory tests of samples of similar soils in nearby areas. Tests verify field observations, verify properties that cannot be estimated accurately by field observation, and help to characterize key soils.

The estimates of soil properties shown in the tables include the range of grain-size distribution and Atterberg limits, the engineering classification, and the physical and chemical properties of the major horizons of each soil. Pertinent soil and water features also are given.

## Engineering Index Properties

Table 22 gives estimates of the engineering classification and of the range of index properties for the major horizons of each soil. Most soils have horizons of contrasting properties within the upper 5 or 6 feet.

*Depth* to the upper and lower boundaries of each horizon is indicated.

*Texture* is given in the standard terms used by the U.S. Department of Agriculture. These terms are defined according to percentages of sand, silt, and clay in the fraction of the soil that is less than 2 millimeters in diameter. "Loam," for example, is soil that is 7 to 27 percent clay, 28 to 50 percent silt, and less than 52 percent sand. If the content of particles coarser than sand is as much as 15 percent, an appropriate modifier is added, for example, "gravelly." Textural terms are defined in the Glossary.

*Classification* of the soils is determined according to the Unified soil classification system (ASTM, 2001) and the system adopted by the American Association of State Highway and Transportation Officials (AASHTO, 2000).

The Unified system classifies soils according to properties that affect their use as construction material. Soils are classified according to grain-size distribution of the fraction less than 3 inches in diameter and according to plasticity index, liquid limit, and organic matter content. Sandy and gravelly soils are identified as GW, GP, GM, GC, SW, SP, SM, and SC; silty and clayey soils as ML, CL, OL, MH, CH, and OH; and highly organic soils as PT. Soils exhibiting engineering properties of two groups can have a dual classification, for example, SP-SM.

The AASHTO system classifies soils according to those properties that affect roadway construction and maintenance. In this system, the fraction of a mineral soil that is less than 3 inches in diameter is classified in one of seven groups from A-1 through A-7 on the basis of grain-size distribution, liquid limit, and plasticity index. Soils in group A-1 are coarse grained and low in content of fines (silt and clay). At the other

extreme, soils in group A-7 are fine grained. Highly organic soils are classified in group A-8 on the basis of visual inspection.

If laboratory data are available, the A-1, A-2, and A-7 groups are further classified as A-1-a, A-1-b, A-2-4, A-2-5, A-2-6, A-2-7, A-7-5, or A-7-6. As an additional refinement, the suitability of a soil as subgrade material can be indicated by a group index number. Group index numbers range from 0 for the best subgrade material to 20 or higher for the poorest.

*Rock fragments* larger than 10 inches in diameter and 3 to 10 inches in diameter are indicated as a percentage of the total soil on a dry-weight basis. The percentages are estimates determined mainly by converting volume percentage in the field to weight percentage.

*Percentage (of soil particles) passing designated sieves* is the percentage of the soil fraction less than 3 inches in diameter based on an oven-dry weight. The sieves, numbers 4, 10, 40, and 200 (USA Standard Series), have openings of 4.76, 2.00, 0.420, and 0.074 millimeters, respectively. Estimates are based on laboratory tests of soils sampled in the survey area and in nearby areas and on estimates made in the field.

*Liquid limit* and *plasticity index* (Atterberg limits) indicate the plasticity characteristics of a soil. The estimates are based on test data from the survey area or from nearby areas and on field examination.

The estimates of grain-size distribution, liquid limit, and plasticity index are generally rounded to the nearest 5 percent. Thus, if the ranges of gradation and Atterberg limits extend a marginal amount (1 or 2 percentage points) across classification boundaries, the classification in the marginal zone is omitted in the table.

## Physical and Chemical Properties

Tables 23 and 24 show estimates of some characteristics and features that affect soil behavior. These estimates are given for the major horizons of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

*Depth* to the upper and lower boundaries of each horizon is indicated.

In table 23, *clay* as a soil separate, or component, consists of mineral soil particles that are less than 0.002 millimeter in diameter. The estimated clay content of each major soil horizon is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The amount and kind of clay greatly affect the fertility and physical condition of the soil. They determine the ability of the soil to adsorb cations and to retain moisture. They influence linear extensibility, permeability, plasticity, the ease of soil dispersion, and other soil properties. The amount and kind of clay in a soil also affect tillage and earth-moving operations.

*Moist bulk density* is the weight of soil (oven-dry) per unit volume. Volume is measured when the soil is at field moisture capacity, that is, the moisture content at  $\frac{1}{3}$ -bar moisture tension. Weight is determined after drying the soil at 105 degrees C. In table 23, the estimated moist bulk density of each major soil horizon is expressed in grams per cubic centimeter of soil material that is less than 2 millimeters in diameter. Bulk density data are used to compute linear extensibility, available water capacity, total pore space, and other soil properties. The moist bulk density of a soil indicates the pore space available for water and roots. A bulk density of more than 1.6 can restrict water storage and root penetration. Moist bulk density is influenced by texture, kind of clay, content of organic matter, and soil structure.

*Permeability* refers to the ability of a soil to transmit water or air. The term "permeability," as used in soil surveys, indicates saturated hydraulic conductivity ( $K_{sat}$ ).

The estimates in the table indicate the rate of water movement, in inches per hour, when the soil is saturated. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. Permeability is considered in the design of soil drainage systems and septic tank absorption fields.

*Available water capacity* refers to the quantity of water that the soil is capable of storing for use by plants. The capacity for water storage is given in inches of water per inch of soil for each major soil horizon. The capacity varies, depending on soil properties that affect the retention of water and the depth of the root zone. The most important properties are the content of organic matter, soil texture, bulk density, and soil structure. Available water capacity is an important factor in the choice of plants or crops to be grown and in the design and management of irrigation systems. Available water capacity is not an estimate of the quantity of water actually available to plants at any given time.

*Linear extensibility* percent is the linear expression of the volume difference of natural soil fabric at  $1/3$ -bar or  $1/10$ -bar water content and oven dryness. The volume change is reported as percent change for the whole soil. Volume change occurs mainly because of the interaction of clay minerals with water and varies with the amount and type of clay minerals in the soil. The size of the load on the soil and the magnitude of the change in soil moisture content influence the amount of swelling of soils in place. Laboratory measurements of swelling of undisturbed clods were made for many soils. For others, swelling was estimated on the basis of the kind and amount of clay minerals in the soil and on measurements of similar soils.

Linear extensibility of 3 percent or more can cause damage to buildings, roads, and other structures. Special design is often needed.

*Organic matter* is the plant and animal residue in the soil at various stages of decomposition. In table 23, the estimated content of organic matter is expressed as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of organic matter in a soil can be maintained or increased by returning crop residue to the soil. Organic matter affects the available water capacity, infiltration rate, and tilth. It is a source of nitrogen and other nutrients for crops.

*Erosion factors* are shown in table 23 as the K factor ( $K_w$  and  $K_f$ ) and the T factor. Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of several factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and permeability. Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

*Erosion factor  $K_w$*  indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments.

*Erosion factor  $K_f$*  indicates the erodibility of the fine-earth fraction, or the material less than 2 millimeters in size.

*Erosion factor T* is an estimate of the maximum average annual rate of soil erosion by wind or water that can occur without affecting crop productivity over a sustained period. The rate is in tons per acre per year.

*Wind erodibility groups* are made up of soils that have similar properties affecting their susceptibility to wind erosion in cultivated areas. The soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible. Descriptions of these groups are available in the National Soil Survey Handbook (USDA, 2003).

*Wind erodibility index* is a numerical value indicating the susceptibility of soil to wind erosion, or the tons per acre per year that can be expected to be lost to wind erosion. There is a close correlation between wind erosion and the texture of the surface layer,

the size and durability of surface clods, rock fragments, organic matter, and a calcareous reaction. Soil moisture and frozen soil layers also influence wind erosion.

In table 24, *cation-exchange capacity* is the total amount of extractable bases that can be held by the soil, expressed in terms of milliequivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. Soils having a low cation-exchange capacity hold fewer cations and may require more frequent applications of fertilizer than soils having a high cation-exchange capacity. The ability to retain cations reduces the hazard of ground-water pollution.

*Soil reaction* is a measure of acidity or alkalinity and is expressed as a range in pH values. The range in pH of each major horizon is based on many field tests. For many soils, values have been verified by laboratory analyses. Soil reaction is important in selecting crops and other plants, in evaluating soil amendments for fertility and stabilization, and in determining the risk of corrosion.

*Calcium carbonate* equivalent is the percent of carbonates, by weight, in the fraction of the soil less than 2 millimeters in size. The availability of plant nutrients is influenced by the amount of carbonates in the soil. Incorporating nitrogen fertilizer into calcareous soils helps to prevent nitrite accumulation and ammonium-N volatilization.

*Gypsum* is expressed as a percent, by weight, of hydrated calcium sulfates in the fraction of the soil less than 20 millimeters in size. Gypsum is partially soluble in water. Soils that have a high content of gypsum may collapse if the gypsum is removed by percolating water.

*Salinity* is a measure of soluble salts in the soil at saturation. It is expressed as the electrical conductivity of the saturation extract, in millimhos per centimeter at 25 degrees C. Estimates are based on field and laboratory measurements at representative sites of nonirrigated soils. The salinity of irrigated soils is affected by the quality of the irrigation water and by the frequency of water application. Hence, the salinity of soils in individual fields can differ greatly from the value given in the table. Salinity affects the suitability of a soil for crop production, the stability of soil if used as construction material, and the potential of the soil to corrode metal and concrete.

## Water Features

Table 25 provides information about various water features. This information can be used in land use planning that involves engineering considerations.

*Soil moisture status* is an estimate of the fluctuating water content in a soil. It greatly influences vegetation type and plant growth; physical properties of soils, such as permeability, workability, strength, linear extensibility, and frost action; and chemical interactions and transport. Many other properties, qualities, and interpretations also are affected. Soil moisture status is important in the classification of soils, wetland, and habitat.

Table 25 gives estimates of soil moisture for each component of a map unit at various depths for every month of the year. The depths displayed are low, representative, and high values. High and low values represent the normally expected range of values. Representative values are indicative of conditions that occur most commonly. *Dry* indicates a moisture condition under which most plants (especially crops) cannot extract water for growth. *Moist* indicates a moisture condition under which soil water is most readily available for plant growth. *Wet* indicates a condition under which water will stand in an unlined hole or at least a condition under which the soil is too wet for the growth of most agricultural species. A moisture status of 4.0-6.7 (wet) indicates that most of the time the component is saturated at some depth between 4.0 feet and 6.7 feet during the month designated. In some years the soil may be saturated at a depth of less than 4.0 feet or more than 6.7 feet; however, field observations indicate that the soil will be saturated between these depths in most

years. In the summer, the soil may show the effects of drying plus intermittent rains that result in a moist or wet layer over a dry layer that gets moist or wet again.

*Flooding*, the temporary covering of the soil surface by flowing water, is caused by overflow from streams or by runoff from adjacent slopes. Shallow water standing or flowing for short periods after rainfall or snowmelt is not considered flooding. Standing water in marshes and swamps or in closed depressions is considered to be ponding.

Table 25 gives estimates of the frequency and duration of flooding for every month of the year. Flooding frequency is the annual probability of a flood event expressed as a class. *None* indicates no reasonable possibility of flooding (the chance of flooding is nearly 0 percent in any year, or flooding is likely less than once in 500 years). *Very rare* indicates that flooding is very unlikely but possible under extremely unusual weather conditions (the chance of flooding is less than 1 percent in any year, or flooding is likely less than once in 100 years but more than once in 500 years). *Rare* indicates that flooding is unlikely but possible under unusual weather conditions (the chance of flooding is 1 to 5 percent in any year, or flooding is likely 1 to 5 times in 100 years). *Occasional* indicates that flooding occurs infrequently under usual weather conditions (the chance of flooding is 5 to 50 percent in any year, or flooding is likely 5 to 50 times in 100 years). *Frequent* indicates that flooding is likely to occur often under usual weather conditions (the chance of flooding is more than 50 percent in any year, or flooding is likely more than 50 times in 100 years; but the chance of flooding is less than 50 percent in all months in any year). *Very frequent* indicates that flooding is likely to occur very often under usual weather conditions (the chance of flooding is more than 50 percent in all months of any year).

Flooding duration is the average duration of inundation per flood occurrence expressed as a class. *Extremely brief* is 0.1 hour to 4.0 hours; *very brief* is 4 to 48 hours; *brief* is 2 to 7 days; *long* is 7 to 30 days; and *very long* is more than 30 days. About two-thirds to three-fourths of all flooding occurs during the stated period.

The information on flooding is based on evidence in the soil profile, namely thin strata of gravel, sand, silt, or clay deposited by floodwater; irregular decrease in organic matter content with increasing depth; and little or no horizon development.

Also considered are local information about the extent and level of flooding and the relation of each soil on the landscape to historic floods. Information on the extent of flooding based on soil data is less specific than that provided by detailed engineering surveys that delineate flood-prone areas at specific flood frequency levels.

*Ponding* is standing water in a closed depression. Unless a drainage system is installed, the water is removed only by percolation, transpiration, or evaporation.

Table 25 gives estimates of the frequency, duration, and depth of ponding for every month of the year. The depths displayed are low, representative, and high values. Low and high values represent the normally expected range of values. Representative values are indicative of conditions that occur most commonly.

Ponding frequency is the number of times ponding occurs over a period of time. *None* indicates no reasonable possibility of ponding (the chance of ponding is nearly 0 percent in any year). *Rare* indicates that ponding is unlikely but possible under unusual weather conditions (the chance of ponding ranges from nearly 0 percent to 5 percent in any year, or ponding is likely 0 to 5 times in 100 years). *Occasional* indicates that ponding is expected infrequently under usual weather conditions (the chance of ponding ranges from 5 to 50 percent in any one year, or ponding is likely 5 to 50 times in 100 years). *Frequent* indicates that ponding is likely to occur under usual weather conditions (the chance of ponding is more than 50 percent in any year, or ponding is likely more than 50 times in 100 years).

Ponding duration is the average length of time of the ponding occurrence. It is expressed as *very brief* (less than 2 days), *brief* (2 to 7 days), *long* (7 to 30 days), and *very long* (more than 30 days).

## Soil Features

Table 26 gives estimates of various soil features. The estimates are used in land use planning that involves engineering considerations.

A *restrictive layer* is a nearly continuous layer that has one or more physical, chemical, or thermal properties that significantly impede the movement of water and air through the soil or that restrict roots or otherwise provide an unfavorable root environment. Examples are bedrock, cemented layers, dense layers, and frozen layers.

*Subsidence* is the settlement of organic soils or of saturated mineral soils of very low density. Subsidence generally results from either desiccation and shrinkage or oxidation of organic material, or both, following drainage. Subsidence takes place gradually, usually over a period of several years. The table shows the expected initial subsidence, which usually is a result of drainage, and total subsidence, which results from a combination of factors.

*Potential for frost action* is the likelihood of upward or lateral expansion of the soil caused by the formation of segregated ice lenses (frost heave) and the subsequent collapse of the soil and loss of strength on thawing. Frost action occurs when moisture moves into the freezing zone of the soil. Temperature, texture, density, permeability, content of organic matter, and depth to a zone in which the soil moisture status is wet are the most important factors considered in evaluating the potential for frost action. It is assumed that the soil is not insulated by vegetation or snow and is not artificially drained. Silty and highly structured, clayey soils that have a saturated zone high in the profile during the winter are the most susceptible to frost action. Well drained, very gravelly, or very sandy soils are the least susceptible. Frost heave and low soil strength during thawing cause damage to pavements and other rigid structures.

*Risk of corrosion* pertains to potential soil-induced electrochemical or chemical action that corrodes or weakens uncoated steel or concrete. The rate of corrosion of uncoated steel is related to such factors as soil moisture, particle-size distribution, acidity, and electrical conductivity of the soil. The rate of corrosion of concrete is based mainly on the sulfate and sodium content, texture, moisture content, and acidity of the soil. Special site examination and design may be needed if the combination of factors results in a severe hazard of corrosion. The steel or concrete in installations that intersect soil boundaries or soil layers is more susceptible to corrosion than the steel or concrete in installations that are entirely within one kind of soil or within one soil layer.

For uncoated steel, the risk of corrosion, expressed as *low*, *moderate*, or *high*, is based on soil drainage class, total acidity, electrical resistivity near field capacity, and electrical conductivity of the saturation extract.

For concrete, the risk of corrosion also is expressed as *low*, *moderate*, or *high*. It is based on soil texture, acidity, and amount of sulfates in the saturation extract.

Table 22.--Engineering Index Properties

(Absence of an entry indicates that the data were not estimated)

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In			Pct	Pct					Pct		
B109A:													
Bowstring-----	45	0-38	Muck	PT	A-8	0	0	100	100	---	---	---	---
		38-47	Stratified sand to fine sandy loam	SC-SM, SM, SP-SM	A-2-4, A-2	0	0	100	100	50-85	10-35	15-20	NP-5
		47-80	Muck	PT	A-8	0	0	100	100	---	---	---	---
Fluvaquents-----	40	0-16	Fine sandy loam	SC-SM, SM, ML, CL-ML	A-4	0	0	95-100	90-100	70-85	40-55	0-25	NP-10
		16-80	Stratified loamy sand to silt loam	CL, ML, SM	A-1, A-3, A-4, A-6	0	0	95-100	70-100	35-95	5-80	0-40	NP-15
Hapludalfs-----	5	0-6	Fine sandy loam	SC-SM, CL-ML	A-4	0	0-3	95-100	85-100	70-85	35-55	20-30	5-10
		6-8	Fine sand, loamy fine sand, fine sandy loam	SM, ML	A-2-4, A-4	0	0-3	95-100	85-100	70-90	30-50	15-25	NP-5
		8-25	Loam, clay loam, silty clay loam	CL	A-6	0	0-5	95-100	85-100	75-100	50-95	25-40	10-20
		25-80	Fine sandy loam, loam, silt loam	CL-ML, CL, SC	A-4, A-6	0-1	0-5	95-100	85-100	70-100	35-90	20-35	5-15
Seelyeville-----	5	0-10	Muck	PT	A-8	0	0	100	100	---	---	---	---
		10-80	Muck, mucky peat	PT	A-8	0	0	100	100	---	---	---	---
Water-----	5	---	---	---	---	---	---	---	---	---	---	---	---
B200A:													
Garnes-----	70	0-6	Fine sandy loam	SC-SM, SM	A-4	0	0-5	85-100	85-95	65-85	35-50	15-35	NP-10
		6-9	Fine sand, sand, loamy fine sand	SP-SM, SM	A-1, A-2-4, A-3, A-2	0	0-2	95-100	95-100	45-75	5-30	0-20	NP-3
		9-14	Clay loam, sandy clay loam, loam	CL, SC	A-4, A-6	0-1	0-5	95-100	80-100	70-100	45-80	20-40	7-20
		14-72	Clay loam, loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		72-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
B200A: Chilgren-----	13	0-4	Fine sandy loam	SM, CL-ML, ML, SC-SM	A-2-4, A-4, A-2	0-1	0-3	90-100	85-100	60-85	25-55	15-35	NP-10
		4-10	Fine sand, fine sandy loam, loamy fine sand	SP-SM, SM	A-1, A-2-4, A-3, A-2	0	0-2	95-100	95-100	45-75	5-30	0-20	NP-3
		10-18	Clay loam, sandy clay loam, loam	CL, SC	A-4, A-6	0-1	0-5	95-100	80-100	70-100	45-80	20-40	7-20
		18-72	Loam, clay loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		72-80	Clay loam, loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Eckvoll-----	5	0-9	Loamy fine sand	SC-SM, SM	A-2-4	0-1	0-2	90-100	85-100	65-80	15-30	0-20	NP-5
		9-25	Fine sand, sand, loamy fine sand	SP-SM, SM	A-1, A-2-4, A-3	0	0-2	95-100	95-100	45-75	5-30	0-20	NP-3
		25-32	Clay loam, sandy clay loam, loam	CL, SC	A-6	0	0-5	90-100	75-100	60-95	45-75	25-40	10-20
		32-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Garnes, very stony-----	5	0-6	Loam	CL-ML, ML	A-4	1-3	1-10	95-100	85-100	60-90	50-65	15-35	NP-10
		6-9	Fine sand, sand, loamy fine sand	SP-SM, SM	A-1, A-2-4, A-3, A-2	0	0-2	95-100	95-100	45-75	5-30	0-20	NP-3
		9-14	Clay loam, sandy clay loam, loam	CL, SC	A-4, A-6	0-1	0-5	95-100	80-100	70-100	45-80	20-40	7-20
		14-72	Clay loam, loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		72-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Grygla-----	4	0-6	Loamy fine sand	SM, SC-SM	A-2-4	0	0	100	95-100	85-95	15-35	0-25	NP-5
		6-26	Sand, fine sand, loamy fine sand	SP-SM, SM, SC-SM	A-2-4, A-3	0	0-1	95-100	90-100	70-95	5-35	0-20	NP-5
		26-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
<b>B200A:</b>													
Pelan-----	3	0-6	Sandy loam	SC-SM, SM	A-4	0	0-5	85-100	85-95	65-85	35-50	15-35	NP-10
		6-9	Fine sand, sand, loamy fine sand	SP-SM, SM	A-1, A-2, A-3	0	0-2	95-100	95-100	45-75	5-30	0-20	NP-3
		9-14	Very gravelly sandy loam, very gravelly sandy clay loam	SC, GC, SM, GM	A-1, A-2	0	2-5	45-85	25-50	10-45	5-35	20-30	NP-10
		14-20	Very gravelly sand, very gravelly coarse sand, very gravelly loamy sand	GP, GP-GM, SP, SP-SM	A-1	0	2-5	30-65	15-45	5-40	0-10	0-20	NP-3
		20-60	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
<b>B201A:</b>													
Chilgren-----	75	0-4	Fine sandy loam	SM, CL-ML, ML, SC-SM	A-2-4, A-4, A-2	0-1	0-3	90-100	85-100	60-85	25-55	15-35	NP-10
		4-10	Fine sand, fine sandy loam, loamy fine sand	SP-SM, SM	A-1, A-2-4, A-3, A-2	0	0-2	95-100	95-100	45-75	5-30	0-20	NP-3
		10-18	Clay loam, sandy clay loam, loam	CL, SC	A-4, A-6	0-1	0-5	95-100	80-100	70-100	45-80	20-40	7-20
		18-72	Clay loam, loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		72-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
<b>Garnes-----</b>	9	0-6	Fine sandy loam	SC-SM, SM	A-4	0	0-5	85-100	85-95	65-85	35-50	15-35	NP-10
		6-9	Fine sand, sand, loamy fine sand	SP-SM, SM	A-2, A-1, A-2-4, A-3	0	0-2	95-100	95-100	45-75	5-30	0-20	NP-3
		9-14	Clay loam, sandy clay loam, loam	CL, SC	A-4, A-6	0-1	0-5	95-100	80-100	70-100	45-80	20-40	7-20
		14-72	Clay loam, loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		72-80	Clay loam, loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
B201A:													
Grygla-----	5	0-6	Loamy fine sand	SM, SC-SM	A-2-4	0	0	100	95-100	85-95	15-35	0-25	NP-5
		6-26	Sand, fine sand, loamy fine sand	SP-SM, SM, SC-SM	A-2-4, A-3	0	0-1	95-100	90-100	70-95	5-35	0-20	NP-5
		26-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Grygla, depressional---	5	0-6	Mucky loamy fine sand	SM, SC-SM	A-2-4	0	0	100	95-100	85-95	15-35	0-25	NP-5
		6-26	Sand, fine sand, loamy fine sand	SP-SM, SM, SC-SM	A-2-4, A-3	0	0-1	95-100	90-100	70-95	5-35	0-20	NP-5
		26-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Hamre-----	5	0-13	Muck	PT	A-8	0	0	100	100	---	---	---	---
		13-18	Loam, clay loam, silt loam	CL, CL-ML	A-4, A-6	0-1	0-3	90-100	80-100	70-100	50-90	25-40	5-20
		18-35	Clay loam, loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		35-80	Loam, clay loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Pelan-----	1	0-6	Sandy loam	SC-SM, SM	A-4	0	0-5	85-100	85-95	65-85	35-50	15-35	NP-10
		6-9	Fine sand, sand, loamy fine sand	SP-SM, SM	A-1, A-2, A-3	0	0-2	95-100	95-100	45-75	5-30	0-20	NP-3
		9-14	Very gravelly sandy loam, very gravelly sandy clay loam	SC, GC, SM, GM	A-1, A-2	0	2-5	45-85	25-50	10-45	5-35	20-30	NP-10
		14-20	Very gravelly sand, very gravelly coarse sand, very gravelly loamy sand	GP, GP-GM, SP, SP-SM	A-1	0	2-5	30-65	15-45	5-40	0-10	0-20	NP-3
		20-60	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
B202A:													
Cathro-----	80	0-11	Muck	PT	A-8	0	0	100	100	---	---	---	---
		11-23	Muck	PT	A-8	0	0	100	100	---	---	---	---
		23-60	Clay loam, loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In			Pct	Pct					Pct		
B202A: Hamre-----	8	0-13	Muck	PT	A-8	0	0	100	100	---	---	---	---
		13-18	Loam, clay loam, silt loam	CL, CL-ML	A-4, A-6	0-1	0-3	90-100	80-100	70-100	50-90	25-40	5-20
		18-35	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		35-80	Loam, clay loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Chilgren-----	3	0-4	Fine sandy loam	SM, CL-ML, ML, SC-SM	A-2-4, A-4, A-2	0-1	0-3	90-100	85-100	60-85	25-55	15-35	NP-10
		4-10	Fine sand, fine sandy loam, loamy fine sand	SP-SM, SM	A-1, A-2-4, A-3, A-2	0	0-2	95-100	95-100	45-75	5-30	0-20	NP-3
		10-18	Clay loam, sandy clay loam, loam	CL, SC	A-4, A-6	0-1	0-5	95-100	80-100	70-100	45-80	20-40	7-20
		18-72	Clay loam, loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
72-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20		
Northwood-----	3	0-9	Muck	PT	A-8	0	0	100	100	---	---	---	---
		9-14	Fine sandy loam, loamy fine sand, loamy sand	SC-SM, SM	A-2-4, A-4	0	0-3	95-100	90-100	50-85	15-50	0-25	NP-10
		14-24	Coarse sand, fine sand, loamy fine sand	SM, SP-SM	A-2-4, A-2, A-3	0	0-3	95-100	80-100	70-95	5-35	0-15	NP-3
		24-80	Loam, clay loam	CL-ML, CL	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Berner-----	2	0-28	Muck	PT	A-8	0	0	100	100	---	---	---	---
		28-31	Sandy loam, fine sandy loam, gravelly sandy loam	SC, SC-SM, SM	A-2-4, A-4	0	0	90-100	70-100	50-85	10-50	15-25	NP-10
		31-44	Sand, loamy sand, gravelly sand	SP, SP-SM, SM	A-2-4, A-3	0	0	90-100	70-100	60-80	0-25	0-20	NP-3
		44-80	Loam, clay loam	CL-ML, CL	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
B202A:													
Grygla-----	2	0-6	Loamy fine sand	SM, SC-SM	A-2-4	0	0	100	95-100	85-95	15-35	0-25	NP-5
		6-26	Sand, fine sand, loamy fine sand	SP-SM, SM, SC-SM	A-2-4, A-3	0	0-1	95-100	90-100	70-95	5-35	0-20	NP-5
		26-80	Clay loam, loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Seelyeville----	2	0-10	Muck	PT	A-8	0	0	100	100	---	---	---	---
		10-80	Muck, mucky peat	PT	A-8	0	0	100	100	---	---	---	---
B203A:													
Northwood-----	75	0-9	Muck	PT	A-8	0	0	100	100	---	---	---	---
		9-14	Fine sandy loam, loamy fine sand, loamy sand	SC-SM, SM	A-2-4, A-4	0	0-3	95-100	90-100	50-85	15-50	0-25	NP-10
		14-24	Coarse sand, fine sand, loamy fine sand	SM, SP-SM	A-2-4, A-2, A-3	0	0-3	95-100	80-100	70-95	5-35	0-15	NP-3
		24-80	Loam, clay loam	CL-ML, CL	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Hamre-----	10	0-13	Muck	PT	A-8	0	0	100	100	---	---	---	---
		13-18	Loam, clay loam, silt loam	CL, CL-ML	A-4, A-6	0-1	0-3	90-100	80-100	70-100	50-90	25-40	5-20
		18-35	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		35-80	Loam, clay loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Grygla-----	7	0-6	Loamy fine sand	SM, SC-SM	A-2-4	0	0	100	95-100	85-95	15-35	0-25	NP-5
		6-26	Sand, fine sand, loamy fine sand	SP-SM, SM, SC-SM	A-2-4, A-3	0	0-1	95-100	90-100	70-95	5-35	0-20	NP-5
		26-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Berner-----	5	0-28	Muck	PT	A-8	0	0	100	100	---	---	---	---
		28-31	Sandy loam, fine sandy loam, gravelly sandy loam	SC, SC-SM, SM	A-2-4, A-4	0	0	90-100	70-100	50-85	10-50	15-25	NP-10
		31-44	Sand, loamy sand, gravelly sand	SP, SP-SM, SM	A-2, A-3	0	0	90-100	70-100	60-80	0-25	0-20	NP-3
		44-80	Loam, clay loam	CL-ML, CL	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
<b>B203A:</b>													
Chilgren-----	3	0-4	Fine sandy loam	ML, SC-SM, SM, CL-ML	A-2-4, A-4, A-2	0-1	0-3	90-100	85-100	60-85	25-55	15-35	NP-10
		4-10	Fine sand, fine sandy loam, loamy fine sand	SP-SM, SM	A-1, A-2-4, A-3, A-2	0	0-2	95-100	95-100	45-75	5-30	0-20	NP-3
		10-18	Clay loam, sandy clay loam, loam	CL, SC	A-4, A-6	0-1	0-5	95-100	80-100	70-100	45-80	20-40	7-20
		18-72	Clay loam, loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		72-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
<b>B204A:</b>													
Roliss-----	75	0-14	Loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	80-100	80-100	60-90	20-40	5-20
		14-20	Clay loam, loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		20-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
<b>Grygla-----</b>	8	0-6	Loamy fine sand	SM, SC-SM	A-2-4	0	0	100	95-100	85-95	15-35	0-25	NP-5
		6-26	Sand, fine sand, loamy fine sand	SP-SM, SM, SC-SM	A-2-4, A-3	0	0-1	95-100	90-100	70-95	5-35	0-20	NP-5
		26-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
<b>Chilgren-----</b>	5	0-4	Fine sandy loam	SM, CL-ML, ML, SC-SM	A-2-4, A-4, A-2	0-1	0-3	90-100	85-100	60-85	25-55	15-35	NP-10
		4-10	Fine sand, fine sandy loam, loamy fine sand	SP-SM, SM	A-1, A-2-4, A-3, A-2	0	0-2	95-100	95-100	45-75	5-30	0-20	NP-3
		10-18	Clay loam, sandy clay loam, loam	CL, SC	A-4, A-6	0-1	0-5	95-100	80-100	70-100	45-80	20-40	7-20
		18-72	Loam, clay loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		72-80	Clay loam, loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
<b>Garnes-----</b>	5	0-6	Fine sandy loam	SC-SM, SM	A-4	0	0-5	85-100	85-95	65-85	35-50	15-35	NP-10
		6-9	Fine sand, sand, loamy fine sand	SP-SM, SM	A-2, A-1, A-2-4, A-3	0	0-2	95-100	95-100	45-75	5-30	0-20	NP-3
		9-14	Clay loam, sandy clay loam, loam	CL, SC	A-4, A-6	0-1	0-5	95-100	80-100	70-100	45-80	20-40	7-20
		14-72	Loam, clay loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		72-80	Clay loam, loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
B204A: Roliss, depressional---	5	In 0-14 14-20 20-80	Loam Clay loam, loam Loam, clay loam	CL, CL-ML CL, CL-ML CL, CL-ML	A-4, A-6 A-4, A-6 A-6, A-4	0-1 0-1 0-1	0-1 0-5 0-5	95-100 95-100 95-100	85-95 85-95 85-95	80-95 75-90 75-90	60-85 50-75 50-75	20-40 25-40 25-40	5-20 5-20 5-20
Hamre-----	2	0-13 13-18 18-35 35-80	Muck Loam, clay loam, silt loam Clay loam, loam Loam, clay loam	PT CL, CL-ML CL, CL-ML CL, CL-ML	A-8 A-4, A-6 A-6, A-4 A-4, A-6	0 0-1 0-1 0-1	0 0-3 0-5 0-5	100 90-100 95-100 95-100	100 80-100 85-95 85-95	--- 70-100 75-90 75-90	--- 50-90 50-75 50-75	--- 25-40 25-40 25-40	--- 5-20 5-20 5-20
B205A: Berner-----	80	0-28 28-31 31-44 44-80	Muck Sandy loam, fine sandy loam, gravelly sandy loam Sand, loamy sand, gravelly sand Loam, clay loam	PT SC, SC-SM, SM SP, SP-SM, SM CL-ML, CL	A-8 A-2, A-2-4, A-4 A-2-4, A-2, A-3 A-6, A-4	0 0 0 0-1	0 0 0 0-5	100 90-100 90-100 95-100	100 70-100 70-100 85-95	--- 50-85 60-80 75-90	--- 10-50 0-25 50-75	--- 15-25 0-20 25-40	--- NP-10 NP-3 5-20
Northwood-----	7	0-9 9-14 14-24 24-80	Muck Fine sandy loam, loamy fine sand, loamy sand Coarse sand, fine sand, loamy fine sand Loam, clay loam	PT SC-SM, SM SM, SP-SM CL-ML, CL	A-8 A-2-4, A-2, A-4 A-2-4, A-2, A-3 A-6, A-4	0 0 0 0-1	0 0-3 0-3 0-5	100 95-100 95-100 95-100	100 90-100 80-100 85-95	--- 50-85 70-95 75-90	--- 15-50 5-35 50-75	--- 0-25 0-15 25-40	--- NP-10 NP-3 5-20
Grygla-----	5	0-6 6-26 26-80	Loamy fine sand Sand, fine sand, loamy fine sand Clay loam, loam	SM, SC-SM SP-SM, SM, SC-SM CL, CL-ML	A-2 A-2-4, A-3 A-6, A-4	0 0 0-1	0 0-1 0-5	100 95-100 95-100	95-100 90-100 85-95	85-95 70-95 75-90	15-35 5-35 50-75	0-25 0-20 25-40	NP-5 NP-5 5-20
Cathro-----	3	0-11 11-23 23-60	Muck Muck Clay loam, loam	PT PT CL, CL-ML	A-8 A-8 A-6, A-4	0 0 0-1	0 0 0-5	100 100 95-100	100 100 85-95	--- --- 75-90	--- --- 50-75	--- --- 25-40	--- --- 5-20

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
			In			Pct	Pct					Pct	
E205A: Hamre-----	3	0-13	Muck	PT	A-8	0	0	100	100	---	---	---	---
		13-18	Loam, clay loam, silt loam	CL, CL-ML	A-4, A-6	0-1	0-3	90-100	80-100	70-100	50-90	25-40	5-20
		18-35	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		35-80	Loam, clay loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Seelyeville----	2	0-10	Muck	PT	A-8	0	0	100	100	---	---	---	---
		10-80	Muck, mucky peat	PT	A-8	0	0	100	100	---	---	---	---
E206A: Hamre-----	80	0-13	Muck	PT	A-8	0	0	100	100	---	---	---	---
		13-18	Loam, clay loam, silt loam	CL, CL-ML	A-4, A-6	0-1	0-3	90-100	80-100	70-100	50-90	25-40	5-20
		18-35	Clay loam, loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		35-80	Loam, clay loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Chilgren-----	8	0-4	Fine sandy loam	SM, CL-ML, ML, SC-SM	A-2-4, A-4, A-2	0-1	0-3	90-100	85-100	60-85	25-55	15-35	NP-10
		4-10	Fine sand, fine sandy loam, loamy fine sand	SP-SM, SM	A-1, A-2-4, A-3, A-2	0	0-2	95-100	95-100	45-75	5-30	0-20	NP-3
		10-18	Clay loam, sandy clay loam, loam	CL, SC	A-4, A-6	0-1	0-5	95-100	80-100	70-100	45-80	20-40	7-20
		18-72	Loam, clay loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		72-80	Clay loam, loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Northwood-----	5	0-9	Muck	PT	A-8	0	0	100	100	---	---	---	---
		9-14	Fine sandy loam, loamy fine sand, loamy sand	SC-SM, SM	A-2-4, A-4	0	0-3	95-100	90-100	50-85	15-50	0-25	NP-10
		14-24	Coarse sand, fine sand, loamy fine sand	SM, SP-SM	A-2-4, A-2, A-3	0	0-3	95-100	80-100	70-95	5-35	0-15	NP-3
		24-80	Loam, clay loam	CL-ML, CL	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
<b>B206A:</b>													
Cathro-----	3	0-11	Muck	PT	A-8	0	0	100	100	---	---	---	---
		11-23	Muck	PT	A-8	0	0	100	100	---	---	---	---
		23-60	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Grygla-----	2	0-6	Loamy fine sand	SM, SC-SM	A-2-4	0	0	100	95-100	85-95	15-35	0-25	NP-5
		6-26	Sand, fine sand, loamy fine sand	SP-SM, SM, SC-SM	A-2-4, A-3	0	0-1	95-100	90-100	70-95	5-35	0-20	NP-5
		26-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Roliss-----	2	0-14	Loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	80-100	80-100	60-90	20-40	5-20
		14-20	Loam, clay loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		20-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
<b>11A:</b>													
Augsburg-----	75	0-11	Loam	ML	A-4	0	0	100	100	95-100	70-95	20-40	NP-10
		11-18	Loam, very fine sandy loam, silt loam	ML, CL-ML	A-4	0	0	100	100	95-100	80-90	0-30	NP-10
		18-33	Loamy very fine sand, very fine sandy loam, loam, very fine sand	ML, CL-ML	A-4	0	0	100	100	95-100	75-90	0-30	NP-10
		33-60	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Borup-----	10	0-12	Loam	ML	A-4	0	0	100	100	95-100	70-95	20-40	NP-10
		12-34	Very fine sandy loam, silt loam, loamy very fine sand	CL-ML, ML	A-4	0	0	100	100	90-100	50-95	0-30	NP-10
		34-60	Loamy very fine sand, very fine sand, very fine sandy loam	CL-ML, ML	A-4	0	0	100	100	85-100	35-90	0-30	NP-10

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In			Pct	Pct					Pct		
<b>I1A:</b>													
Foxlake-----	5	0-19	Loam	CL-ML, CL	A-4, A-6	0-1	0-2	95-100	90-100	75-90	50-80	20-40	5-20
		19-38	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
		38-49	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
		49-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Augsburg, depressional---	3	0-11	Mucky loam	ML	A-4	0	0	100	100	95-100	70-95	0-25	NP-10
		11-18	Loam, very fine sandy loam, silt loam	CL-ML, ML	A-4	0	0	100	100	95-100	80-90	0-30	NP-10
		18-33	Loamy very fine sand, very fine sandy loam, loam	CL-ML, ML	A-4	0	0	100	100	95-100	80-90	0-30	NP-10
		33-60	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Wheatville-----	3	0-9	Very fine sandy loam	CL, CL-ML, ML	A-4	0	0	100	100	90-100	50-95	15-35	NP-10
		9-31	Silt loam, very fine sandy loam, loam	CL-ML, ML, CL	A-4	0	0	100	100	90-100	85-95	0-30	NP-10
		31-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Glyndon-----	2	0-11	Very fine sandy loam	CL, CL-ML, ML	A-4	0	0	100	100	95-100	50-90	20-30	NP-10
		11-28	Silt loam, very fine sandy loam, loam	CL-ML, ML	A-4	0	0	100	100	90-100	85-95	0-30	NP-10
		28-60	Loamy very fine sand, very fine sand, very fine sandy loam	CL-ML, ML, SM	A-4	0	0	100	100	85-100	45-90	0-30	NP-10

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I1A: Espelie-----	1	0-9	Fine sandy loam	CL, ML, SC, SM	A-2-4, A-4	0	0	95-100	85-100	60-85	30-65	0-25	NP-10
		9-24	Loamy sand, loamy fine sand, fine sand	SM, SP-SM	A-2, A-3, A-1, A-2-4	0	0-5	85-100	60-100	30-80	5-40	0-20	NP-3
		24-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Hattie-----	1	0-8	Clay	CH, CL	A-7	0-1	0-1	95-100	95-100	90-100	70-95	45-70	20-50
		8-22	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
		22-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
I2A: Augsburg-----	75	0-11	Very fine sandy loam	CL, CL-ML, ML	A-4	0	0	100	100	95-100	50-90	20-30	NP-10
		11-18	Loam, very fine sandy loam, silt loam	CL-ML, ML	A-4	0	0	100	100	95-100	80-90	0-30	NP-10
		18-33	Loamy very fine sand, very fine sandy loam, loam, very fine sand	CL-ML, ML	A-4	0	0	100	100	95-100	75-90	0-30	NP-10
		33-60	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Borup-----	10	0-12	Very fine sandy loam	CL, CL-ML, ML	A-4	0	0	100	100	95-100	50-90	20-30	NP-10
		12-34	Very fine sandy loam, silt loam, loamy very fine sand	CL-ML, ML	A-4	0	0	100	100	90-100	50-95	0-30	NP-10
		34-60	Loamy very fine sand, very fine sand, very fine sandy loam	ML, CL-ML	A-4	0	0	100	100	85-100	35-90	0-30	NP-10

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In			Pct	Pct					Pct		
I2A:													
Foxlake-----	5	0-19	Loam	CL-ML, CL	A-4, A-6	0-1	0-2	95-100	90-100	75-90	50-80	20-40	5-20
		19-38	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
		38-49	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
		49-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Augsburg, depressional---	3	0-11	Mucky loam	ML	A-4	0	0	100	100	95-100	70-95	0-25	NP-10
		11-18	Loam, very fine sandy loam, silt loam	CL-ML, ML	A-4	0	0	100	100	95-100	80-90	0-30	NP-10
		18-33	Loamy very fine sand, very fine sandy loam, loam	CL-ML, ML	A-4	0	0	100	100	95-100	80-90	0-30	NP-10
		33-60	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Wheatville-----	3	0-9	Very fine sandy loam	CL, CL-ML, ML	A-4	0	0	100	100	90-100	50-95	15-35	NP-10
		9-31	Silt loam, very fine sandy loam, loam	CL-ML, ML, CL	A-4	0	0	100	100	90-100	85-95	0-30	NP-10
		31-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Glyndon-----	2	0-11	Very fine sandy loam	CL, CL-ML, ML	A-4	0	0	100	100	95-100	50-90	20-30	NP-10
		11-28	Silt loam, very fine sandy loam, loam	CL-ML, ML	A-4	0	0	100	100	90-100	85-95	0-30	NP-10
		28-60	Loamy very fine sand, very fine sand, very fine sandy loam	CL-ML, ML, SM	A-4	0	0	100	100	85-100	45-90	0-30	NP-10

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I2A: Espelie-----	1	0-9	Fine sandy loam	CL, ML, SC, SM	A-2-4, A-4	0	0	95-100	85-100	60-85	30-65	0-25	NP-10
		9-24	Loamy sand, loamy fine sand, fine sand	SM, SP-SM	A-2, A-3, A-1, A-2-4	0	0-5	85-100	60-100	30-80	5-40	0-20	NP-3
		24-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Hattie-----	1	0-8	Clay	CH, CL	A-7	0-1	0-1	95-100	95-100	90-100	70-95	45-70	20-50
		8-22	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
		22-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
I3A: Berner-----	80	0-28	Muck	PT	A-8	0	0	100	100	---	---	---	---
		28-31	Sandy loam, fine sandy loam, gravelly sandy loam	SC, SC-SM, SM	A-2-4, A-2, A-4	0	0	90-100	70-100	50-85	10-50	15-25	NP-10
		31-44	Sand, loamy sand, gravelly sand	SP, SP-SM, SM	A-2-4, A-2, A-3	0	0	90-100	70-100	60-80	0-25	0-20	NP-3
		44-80	Clay loam, loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Northwood-----	7	0-9	Muck	PT	A-8	0	0	100	100	---	---	---	---
		9-14	Fine sandy loam, loamy fine sand, loamy sand	SC-SM, SM	A-2-4, A-2, A-4	0	0-3	95-100	90-100	50-85	15-50	0-25	NP-10
		14-24	Coarse sand, fine sand, loamy fine sand	SM, SP-SM	A-2-4, A-2, A-3	0	0-3	95-100	80-100	70-95	5-35	0-15	NP-3
		24-80	Clay loam, loam	CL-ML, CL	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
<b>I3A:</b>													
Kratka-----	5	0-11	Fine sandy loam	SC-SM, SM	A-4	0	0	95-100	90-100	50-80	35-50	0-25	NP-10
		11-18	Loamy sand, sand, loamy fine sand	SW-SM, SP-SM, SM	A-2-4, A-3	0	0	95-100	90-100	50-80	5-35	0-20	NP-3
		18-25	Loamy sand, sand, fine sand	SM, SP-SM, SW-SM	A-2-4, A-2, A-3	0	0	95-100	90-100	50-80	5-35	0-20	NP-3
		25-80	Clay loam, loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
<b>Hamre-----</b>													
Hamre-----	3	0-13	Muck	PT	A-8	0	0	100	100	---	---	---	---
		13-18	Loam, clay loam, silt loam	CL, CL-ML	A-4, A-6	0-1	0-3	90-100	80-100	70-100	50-90	25-40	5-20
		18-71	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		71-80	Loam, clay loam	CL-ML, CL	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
<b>Strathcona-----</b>													
Strathcona-----	3	0-10	Fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0	0	95-100	90-100	70-85	40-55	0-25	NP-10
		10-17	Fine sandy loam, sandy loam, loamy fine sand	SM, SC-SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	20-30	NP-10
		17-28	Sand, fine sand, loamy fine sand	SM, SP-SM	A-3, A-2-4, A-2	0	0-1	95-100	85-100	60-80	3-30	0-20	NP-3
		28-80	Clay loam, loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
<b>Seelyeville-----</b>													
Seelyeville-----	2	0-10	Muck	PT	A-8	0	0	100	100	---	---	---	---
		10-80	Muck, mucky peat	PT	A-8	0	0	100	100	---	---	---	---
<b>I4A:</b>													
Bernier-----	30	0-28	Muck	PT	A-8	0	0	100	100	---	---	---	---
		28-31	Sandy loam, fine sandy loam, gravelly sandy loam	SC, SC-SM, SM	A-2-4, A-2, A-4	0	0	90-100	70-100	50-85	10-50	15-25	NP-10
		31-44	Sand, loamy sand, gravelly sand	SP, SP-SM, SM	A-2-4, A-2, A-3	0	0	90-100	70-100	60-80	0-25	0-20	NP-3
		44-80	Clay loam, loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
			In			Pct	Pct					Pct	
I4A: Rosewood, depressional---	30	0-8	Fine sandy loam	SC, SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	70-85	30-50	0-25	NP-10
		8-18	Fine sandy loam, sandy loam, loamy fine sand	SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	20-30	NP-10
		18-80	Fine sand, sand	SM, SP-SM	A-1, A-2-4, A-3	0	0	85-100	75-100	45-75	5-35	0-20	NP-3
Strathcona, depressional---	30	0-10	Mucky fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0	0	95-100	90-100	70-85	40-55	0-25	NP-10
		10-17	Fine sandy loam, sandy loam, loamy fine sand	SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	20-30	NP-10
		17-28	Sand, fine sand, loamy fine sand	SM, SP-SM	A-3, A-2-4, A-2	0	0-1	95-100	85-100	60-80	3-30	0-20	NP-3
		28-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Rosewood-----	4	0-8	Fine sandy loam	SC, SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-90	30-50	0-25	NP-10
		8-18	Fine sandy loam, sandy loam, loamy fine sand	SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	20-30	NP-10
		18-80	Fine sand, sand	SM, SP-SM	A-1, A-2-4, A-3	0	0	85-100	75-100	45-75	5-35	0-20	NP-3
Deerwood-----	2	0-10	Muck	PT	A-8	0	0	100	100	---	---	---	---
		10-12	Fine sand, loamy sand, fine sandy loam	SM, SC-SM	A-2-4, A-2, A-4	0	0-2	95-100	90-100	50-75	15-50	0-25	NP-10
		12-60	Fine sand, sand, gravelly sand	SM, SP, SP-SM	A-1, A-2, A-3	0	0-5	75-100	55-100	35-70	0-25	0-20	NP-3

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I4A: Mavie-----	2	0-12	Fine sandy loam	SC-SM, SM	A-4	0	0-3	95-100	90-100	50-80	35-50	0-25	NP-10
		12-18	Loam, fine sandy loam, sandy loam	SM, CL-ML, SC, SC-SM	A-4, A-6	0	0-5	95-100	85-100	65-95	15-75	20-35	NP-15
		18-39	Very gravelly coarse sand, very gravelly sand, very gravelly loamy sand	GP, GP-GM, SP, SP-SM	A-1	0	2-5	30-65	15-45	5-40	0-10	0-20	NP-3
		39-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Strathcona-----	2	0-10	Fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0	0	95-100	90-100	70-85	40-55	0-25	NP-10
		10-17	Fine sandy loam, sandy loam, loamy fine sand	SM, SC-SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	20-30	NP-10
		17-28	Sand, fine sand, loamy fine sand	SM, SP-SM	A-2-4, A-2, A-3	0	0-1	95-100	85-100	60-80	3-30	0-20	NP-3
		28-80	Clay loam, loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
I5A: Borup-----	75	0-12	Loam	ML	A-4	0	0	100	100	95-100	70-95	20-40	NP-10
		12-34	Very fine sandy loam, silt loam, loamy very fine sand	CL-ML, ML	A-4	0	0	100	100	90-100	50-95	0-30	NP-10
		34-60	Loamy very fine sand, very fine sand, very fine sandy loam	CL-ML, ML	A-4	0	0	100	100	85-100	35-90	0-30	NP-10

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I5A: Glyndon-----	9	0-11	Very fine sandy loam	CL, CL-ML, ML	A-4	0	0	100	100	95-100	50-90	20-30	NP-10
		11-28	Silt loam, very fine sandy loam, loam	CL-ML, ML	A-4	0	0	100	100	90-100	85-95	0-30	NP-10
		28-60	Loamy very fine sand, very fine sand, very fine sandy loam	CL-ML, ML, SM	A-4	0	0	100	100	85-100	45-90	0-30	NP-10
Rosewood-----	8	0-8	Fine sandy loam	SC, SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-90	30-50	0-25	NP-10
		8-18	Fine sandy loam, sandy loam, loamy fine sand	SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	20-30	NP-10
		18-80	Fine sand, sand	SM, SP-SM	A-1, A-2-4, A-3	0	0	85-100	75-100	45-75	5-35	0-20	NP-3
Augsburg-----	5	0-11	Loam	ML	A-4	0	0	100	100	95-100	70-95	20-40	NP-10
		11-18	Loam, very fine sandy loam, silt loam	ML, CL-ML	A-4	0	0	100	100	95-100	80-90	0-30	NP-10
		18-33	Loamy very fine sand, very fine sandy loam, loam, very fine sand	ML, CL-ML	A-4	0	0	100	100	95-100	75-90	0-30	NP-10
		33-60	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Augsburg, depressional---	3	0-11	Mucky loam	ML	A-4	0	0	100	100	95-100	70-95	0-25	NP-10
		11-18	Loam, very fine sandy loam, silt loam	CL-ML, ML	A-4	0	0	100	100	95-100	80-90	0-30	NP-10
		18-33	Loamy very fine sand, very fine sandy loam, loam	CL-ML, ML	A-4	0	0	100	100	95-100	80-90	0-30	NP-10
		33-60	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
			In			Pct	Pct					Pct	
I6A: Borup-----	75	0-12	Very fine sandy loam	CL, CL-ML, ML	A-4	0	0	100	100	95-100	50-90	20-30	NP-10
		12-34	Very fine sandy loam, silt loam, loamy very fine sand	CL-ML, ML	A-4	0	0	100	100	90-100	50-95	0-30	NP-10
		34-60	Loamy very fine sand, very fine sand, very fine sandy loam	ML, CL-ML	A-4	0	0	100	100	85-100	35-90	0-30	NP-10
Glyndon-----	9	0-11	Very fine sandy loam	CL, CL-ML, ML	A-4	0	0	100	100	95-100	50-90	20-30	NP-10
		11-28	Silt loam, very fine sandy loam, loam	CL-ML, ML	A-4	0	0	100	100	90-100	85-95	0-30	NP-10
		28-60	Loamy very fine sand, very fine sand, very fine sandy loam	CL-ML, ML, SM	A-4	0	0	100	100	85-100	45-90	0-30	NP-10
Rosewood-----	8	0-8	Fine sandy loam	SC, SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-90	30-50	0-25	NP-10
		8-18	Fine sandy loam, sandy loam, loamy fine sand	SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	20-30	NP-10
		18-80	Fine sand, sand	SM, SP-SM	A-1, A-2-4, A-3	0	0	85-100	75-100	45-75	5-35	0-20	NP-3
Augsburg-----	5	0-11	Loam	ML	A-4	0	0	100	100	95-100	70-95	20-40	NP-10
		11-18	Loam, very fine sandy loam, silt loam	ML, CL-ML	A-4	0	0	100	100	95-100	80-90	0-30	NP-10
		18-33	Loamy very fine sand, very fine sandy loam, loam, very fine sand	ML, CL-ML	A-4	0	0	100	100	95-100	75-90	0-30	NP-10
		33-60	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I6A: Augsburg, depressional---	3	0-11	Mucky loam	ML	A-4	0	0	100	100	95-100	70-95	0-25	NP-10
		11-18	Loam, very fine sandy loam, silt loam	CL-ML, ML	A-4	0	0	100	100	95-100	80-90	0-30	NP-10
		18-33	Loamy very fine sand, very fine sandy loam, loam	CL-ML, ML	A-4	0	0	100	100	95-100	80-90	0-30	NP-10
		33-60	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
I7A: Bowstring-----	45	0-38	Muck	PT	A-8	0	0	100	100	---	---	---	---
		38-47	Stratified sand to fine sandy loam	SC-SM, SM, SP-SM	A-2	0	0	100	100	50-85	10-35	15-20	NP-5
		47-80	Muck	PT	A-8	0	0	100	100	---	---	---	---
Fluvaquents-----	45	0-16	Fine sandy loam	SC-SM, SM, ML, CL-ML	A-4	0	0	95-100	90-100	70-85	40-55	0-25	NP-10
		16-80	Stratified loamy sand to silt loam	CL, ML, SM	A-1, A-3, A-4, A-6	0	0	95-100	70-100	35-95	5-80	0-40	NP-15
Hapludolls-----	5	0-9	Loam	CL, CL-ML	A-4, A-6	0	0-3	95-100	95-100	90-100	75-100	20-40	5-15
		9-60	Clay loam, silt loam, loam	CL, CL-ML, SC, SC-SM	A-4, A-6	0-1	0-5	95-100	80-100	55-100	35-90	20-40	5-20
Water-----	5	---	---	---	---	---	---	---	---	---	---	---	---
I8A: Cathro-----	80	0-11	Muck	PT	A-8	0	0	100	100	---	---	---	---
		11-23	Muck	PT	A-8	0	0	100	100	---	---	---	---
		23-60	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Hamre-----	8	0-13	Muck	PT	A-8	0	0	100	100	---	---	---	---
		13-18	Loam, clay loam, silt loam	CL, CL-ML	A-4, A-6	0-1	0-3	90-100	80-100	70-100	50-90	25-40	5-20
		18-71	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		71-80	Loam, clay loam	CL-ML, CL	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
						Pct	Pct					Pct	
<b>I8A:</b>													
Northwood-----	3	0-9	Muck	PT	A-8	0	0	100	100	---	---	---	---
		9-14	Fine sandy loam, loamy fine sand, loamy sand	SC-SM, SM	A-2-4, A-2, A-4	0	0-3	95-100	90-100	50-85	15-50	0-25	NP-10
		14-24	Coarse sand, fine sand, loamy fine sand	SM, SP-SM	A-2-4, A-2, A-3	0	0-3	95-100	80-100	70-95	5-35	0-15	NP-3
		24-80	Loam, clay loam	CL-ML, CL	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Roliss-----	3	0-14	Loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	80-100	80-100	60-90	20-40	5-20
		14-20	Clay loam, loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		20-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Berner-----	2	0-28	Muck	PT	A-8	0	0	100	100	---	---	---	---
		28-31	Sandy loam, fine sandy loam, gravelly sandy loam	SC, SC-SM, SM	A-2-4, A-2, A-4	0	0	90-100	70-100	50-85	10-50	15-25	NP-10
		31-44	Sand, loamy sand, gravelly sand	SP, SP-SM, SM	A-2-4, A-2, A-3	0	0	90-100	70-100	60-80	0-25	0-20	NP-3
		44-80	Clay loam, loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Kratka-----	2	0-11	Fine sandy loam	SC-SM, SM	A-4	0	0	95-100	90-100	50-80	35-50	0-25	NP-10
		11-18	Loamy sand, sand, loamy fine sand	SW-SM, SP-SM, SM	A-2-4, A-3	0	0	95-100	90-100	50-80	5-35	0-20	NP-3
		18-25	Loamy sand, sand, fine sand	SP-SM, SW-SM, SM	A-2-4, A-2, A-3	0	0	95-100	90-100	50-80	5-35	0-20	NP-3
		25-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Seelyeville-----	2	0-10	Muck	PT	A-8	0	0	100	100	---	---	---	---
		10-80	Muck, mucky peat	PT	A-8	0	0	100	100	---	---	---	---

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I9A:													
Clearwater-----	80	0-8	Clay	CH, CL	A-7	0-1	0-1	95-100	95-100	90-100	70-95	45-70	20-50
		8-35	Clay, silty clay, silty clay loam	CH, CL	A-7	0-1	0-3	95-100	95-100	90-100	70-95	40-70	20-45
		35-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Clearwater, very cobbly-----	5	0-8	Clay	CH, CL	A-7	1-3	1-10	95-100	95-100	90-100	70-95	45-70	20-50
		8-35	Clay, silty clay, silty clay loam	CH, CL	A-7	0-1	0-3	95-100	95-100	90-100	70-95	40-70	20-45
		35-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Reis-----	5	0-9	Clay	CH, CL	A-7	0-1	0-1	95-100	95-100	90-100	70-95	45-70	20-50
		9-17	Clay, silty clay	CH, CL	A-7	0-1	0-3	95-100	95-100	90-100	70-95	45-75	20-50
		17-33	Clay, silty clay	CH, CL	A-7	0-1	0-3	95-100	95-100	90-100	70-95	45-75	20-50
		33-42	Clay, silty clay	CH, CL	A-7	0-1	0-3	95-100	95-100	90-100	70-95	45-75	20-50
		42-60	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
		60-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Clearwater, depressional---	3	0-8	Mucky clay loam	CL	A-6	0	0-3	95-100	95-100	80-95	60-85	25-40	10-20
		8-35	Clay, silty clay, silty clay loam	CH, CL	A-7	0-1	0-1	95-100	95-100	90-100	70-95	40-70	20-45
		35-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I9A: Espelie-----	3	0-9	Fine sandy loam	CL, ML, SC, SM	A-2-4, A-4	0	0	95-100	85-100	60-85	30-65	0-25	NP-10
		9-24	Loamy sand, loamy fine sand, fine sand	SM, SP-SM	A-2, A-3, A-1, A-2-4	0	0-5	85-100	60-100	30-80	5-40	0-20	NP-3
		24-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Foxlake-----	2	0-19	Loam	CL-ML, CL	A-4, A-6	0-1	0-2	95-100	90-100	75-90	50-80	20-40	5-20
		19-38	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
		38-49	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
		49-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Hattie-----	1	0-8	Clay	CH, CL	A-7	0-1	0-1	95-100	95-100	90-100	70-95	45-70	20-50
		8-22	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
		22-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Huot-----	1	0-14	Fine sandy loam	SM, SC-SM	A-4	0	0	90-100	75-100	50-85	25-55	0-30	NP-10
		14-26	Loamy fine sand, fine sandy loam	SM, SC-SM	A-2-4, A-4	0	0	95-100	95-100	60-85	25-55	15-25	NP-10
		26-34	Loamy fine sand, fine sand	SP-SM, SM	A-2-4, A-3, A-2	0	0	90-100	75-100	50-80	5-35	0-20	NP-3
		34-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I10A: Clearwater, depressional---	85	0-8	Mucky clay loam	CL	A-6	0	0-3	95-100	95-100	80-95	60-85	25-40	10-20
		8-35	Clay, silty clay, silty clay loam	CH, CL	A-7	0-1	0-1	95-100	95-100	90-100	70-95	40-70	20-45
		35-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Clearwater-----	9	0-8	Clay	CH, CL	A-7	0-1	0-1	95-100	95-100	90-100	70-95	45-70	20-50
		8-35	Clay, silty clay, silty clay loam	CH, CL	A-7	0-1	0-3	95-100	95-100	90-100	70-95	40-70	20-45
		35-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Augsburg, depressional---	3	0-11	Mucky loam	ML	A-4	0	0	100	100	95-100	70-95	0-25	NP-10
		11-18	Loam, very fine sandy loam, silt loam	CL-ML, ML	A-4	0	0	100	100	95-100	80-90	0-30	NP-10
		18-33	Loamy very fine sand, very fine sandy loam, loam	CL-ML, ML	A-4	0	0	100	100	95-100	80-90	0-30	NP-10
		33-60	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Reis-----	2	0-9	Clay	CH, CL	A-7	0-1	0-1	95-100	95-100	90-100	70-95	45-70	20-50
		9-17	Clay, silty clay	CH, CL	A-7	0-1	0-3	95-100	95-100	90-100	70-95	45-75	20-50
		17-33	Clay, silty clay	CH, CL	A-7	0-1	0-3	95-100	95-100	90-100	70-95	45-75	20-50
		33-42	Clay, silty clay	CH, CL	A-7	0-1	0-3	95-100	95-100	90-100	70-95	45-75	20-50
		42-60	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
		60-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
			In			Pct	Pct					Pct	
I10A: Espelie-----	1	0-9	Fine sandy loam	CL, ML, SC, SM	A-2-4, A-4	0	0	95-100	85-100	60-85	30-65	0-25	NP-10
		9-24	Loamy sand, loamy fine sand, fine sand	SM, SP-SM	A-2, A-3, A-1, A-2-4	0	0-5	85-100	60-100	30-80	5-40	0-20	NP-3
		24-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
I11A: Deerwood-----	85	0-10	Muck	PT	A-8	0	0	100	100	---	---	---	---
		10-12	Fine sand, loamy sand, fine sandy loam	SM, SC-SM	A-2-4, A-2, A-4	0	0-2	95-100	90-100	50-75	15-50	0-25	NP-10
		12-60	Fine sand, sand, gravelly sand	SM, SP, SP-SM	A-1, A-2, A-3	0	0-5	75-100	55-100	35-70	0-25	0-20	NP-3
Rosewood-----	6	0-8	Fine sandy loam	SC, SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-90	30-50	0-25	NP-10
		8-18	Fine sandy loam, sandy loam, loamy fine sand	SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	20-30	NP-10
		18-80	Fine sand, sand	SM, SP-SM	A-1, A-2-4, A-3	0	0	85-100	75-100	45-75	5-35	0-20	NP-3
Markey-----	3	0-32	Muck	PT	A-8	0	0	100	100	---	---	---	---
		32-60	Fine sand, loamy sand, coarse sand	SM, SP, SP-SM	A-2, A-3, A-2-4	0	0	100	75-100	60-75	0-20	0-20	NP-3
Strathcona-----	2	0-10	Fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0	0	95-100	90-100	70-85	40-55	0-25	NP-10
		10-17	Fine sandy loam, sandy loam, loamy fine sand	SM, SC-SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	20-30	NP-10
		17-28	Sand, fine sand, loamy fine sand	SM, SP-SM	A-2-4, A-3, A-2	0	0-1	95-100	90-100	50-80	5-30	0-20	NP-3
		28-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I11A: Syrene-----	2	0-9	Sandy loam	SC-SM, SM	A-4	0-1	0-3	95-100	80-100	60-75	20-45	0-25	NP-10
		9-17	Loam, sandy loam, sandy clay loam	CL-ML, SC-SM, CL, SC	A-4	0	0-5	95-100	85-100	50-75	15-65	20-35	5-15
		17-27	Stratified loamy fine sand to gravelly coarse sand	SP, SP-SM	A-1, A-2, A-3	0-1	0-5	70-95	55-80	30-60	0-10	0-20	NP-3
		27-60	Stratified loamy fine sand to gravelly coarse sand	SP, SP-SM	A-1, A-2, A-3	0-1	0-5	70-95	55-80	30-60	0-10	0-20	NP-3
Venlo-----	2	0-13	Fine sandy loam	SC-SM, SM	A-2-4, A-4	0	0	100	95-100	50-85	30-50	0-25	NP-5
		13-60	Fine sand, loamy sand, loamy fine sand	SC-SM, SM, SP-SM	A-3, A-2-4	0	0	100	95-100	50-80	5-35	0-20	NP-3
I12A: Eckvoll-----	70	0-9	Loamy fine sand	SC-SM, SM	A-2	0-1	0-2	90-100	85-100	65-80	15-30	0-20	NP-5
		9-25	Fine sand, sand, loamy fine sand	SP-SM, SM	A-1, A-2, A-3	0	0-2	95-100	95-100	45-75	5-30	0-20	NP-3
		25-32	Clay loam, sandy clay loam, loam	CL, SC	A-6	0	0-5	90-100	75-100	60-95	45-75	25-40	10-20
		32-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Kratka-----	8	0-11	Fine sandy loam	SC-SM, SM	A-4	0	0	95-100	90-100	50-80	35-50	0-25	NP-10
		11-18	Loamy sand, sand, loamy fine sand	SW-SM, SP-SM, SM	A-2-4, A-3	0	0	95-100	90-100	50-80	5-35	0-20	NP-3
		18-25	Loamy sand, sand, fine sand	SP-SM, SW-SM, SM	A-2-4, A-2, A-3	0	0	95-100	90-100	50-80	5-35	0-20	NP-3
		25-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
			In			Pct	Pct					Pct	
I12A: Smiley-----	7	0-12	Loam	CL, CL-ML, ML	A-4, A-6	0-1	0-2	95-100	85-100	70-95	50-80	15-35	2-12
		12-19	Clay loam, loam, silty clay loam	CL	A-6	0-1	0-3	95-100	85-100	70-95	50-80	25-40	10-20
		19-42	Clay loam, loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		42-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Linveltdt-----	5	0-9	Fine sandy loam	SC-SM, SM	A-2-4, A-4	0	0-5	95-100	95-100	65-90	20-50	0-25	NP-10
		9-16	Sandy clay loam, loam, sandy loam	CL, CL-ML, SC, SC-SM	A-2-4, A-4	0-1	0-5	95-100	80-100	50-90	25-75	20-30	5-10
		16-29	Loamy sand, sand, coarse sand	SC-SM, SM, SP-SM	A-1, A-2, A-3	0-1	0-5	65-100	55-100	30-80	5-30	0-20	NP-3
		29-45	Loam, clay loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		45-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Reiner-----	5	0-7	Fine sandy loam	SC-SM, SM	A-4	0	0-5	85-100	85-95	65-85	35-50	15-35	NP-10
		7-17	Clay loam, loam, sandy clay loam	CL	A-6	0	0-3	85-100	75-100	60-95	55-80	25-40	10-20
		17-35	Clay loam, loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		35-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Foldahl-----	2	0-12	Loamy fine sand	SM, SC-SM	A-2-4	0	0	100	95-100	65-85	15-30	0-20	NP-5
		12-30	Fine sand, loamy fine sand, sand	SM, SW-SM, SP-SM	A-2-4, A-3	0	0-2	95-100	90-100	50-80	5-30	0-20	NP-3
		30-80	Clay loam, loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I12A:													
Pelan-----	2	0-6	Sandy loam	SC-SM, SM	A-4	0	0-5	85-100	85-95	65-85	35-50	15-35	NP-10
		6-9	Fine sand, sand, loamy fine sand	SP-SM, SM	A-1, A-2, A-3	0	0-2	95-100	95-100	45-75	5-30	0-20	NP-3
		9-14	Very gravelly sandy loam, very gravelly sandy clay loam	SC, GC, SM, GM	A-1, A-2	0	2-5	45-85	25-50	10-45	5-35	20-30	NP-10
		14-20	Very gravelly sand, very gravelly coarse sand, very gravelly loamy sand	GP, GP-GM, SP, SP-SM	A-1	0	2-5	30-65	15-45	5-40	0-10	0-20	NP-3
		20-60	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Poppleton-----	1	0-6	Fine sand	SM, SC-SM	A-2-4	0	0	95-100	95-100	65-80	15-30	0-20	NP-5
		6-9	Fine sand, sand	SM	A-2-4, A-3	0	0	100	100	80-95	5-15	0-20	NP-3
		9-40	Fine sand, sand	SM	A-2-4, A-3	0	0	100	100	80-95	5-15	0-20	NP-3
		40-60	Fine sand, sand	SM	A-2-4, A-3	0	0	100	100	80-95	5-15	0-20	NP-3
I13A:													
Espelie-----	75	0-9	Fine sandy loam	CL, ML, SC, SM	A-2-4, A-4	0	0	95-100	85-100	60-85	30-65	0-25	NP-10
		9-24	Loamy sand, loamy fine sand, fine sand	SM, SP-SM	A-2, A-3, A-1, A-2-4	0	0-5	85-100	60-100	30-80	5-40	0-20	NP-3
		24-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Foxlake-----	8	0-19	Loam	CL-ML, CL	A-4, A-6	0-1	0-2	95-100	90-100	75-90	50-80	20-40	5-20
		19-38	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
		38-49	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
		49-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
			In			Pct	Pct					Pct	
113A:													
Hilaire-----	7	0-10	Fine sandy loam	SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-90	20-50	0-25	NP-10
		10-34	Fine sand, loamy fine sand, sand	SM, SP-SM	A-1, A-3, A-2-4	0	0-5	85-100	75-100	45-85	5-40	0-20	NP-3
		34-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Clearwater, depressiona---	5	0-8	Mucky clay loam	CL	A-6	0	0-3	95-100	95-100	80-95	60-85	25-40	10-20
		8-35	Clay, silty clay, silty clay loam	CH, CL	A-7	0-1	0-1	95-100	95-100	90-100	70-95	40-70	20-45
		35-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Thiefriever-----	5	0-12	Fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0	0	95-100	80-100	70-90	35-55	0-25	NP-10
		12-23	Fine sandy loam, sandy loam, loamy fine sand	SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	20-30	NP-10
		23-32	Fine sand, loamy fine sand, loamy sand	SM, SP-SM	A-2-4, A-2, A-3	0	0-3	90-100	80-100	50-80	5-35	0-20	NP-3
		32-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I14B:													
Fairdale-----	85	0-7	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	90-100	60-90	20-40	5-15
		7-48	Stratified very fine sandy loam to silty clay loam	CL, CL-ML, ML	A-4, A-6	0	0	100	100	85-100	55-90	20-40	NP-20
		48-67	Silty clay loam, fine sandy loam, silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	70-100	50-90	20-40	5-15
		67-80	Stratified very fine sandy loam to silty clay loam	CL, CL-ML, ML	A-4, A-6	0	0	100	100	85-100	55-90	20-40	NP-20
Fluvaquents----	6	0-16	Fine sandy loam	SC-SM, SM, ML, CL-ML	A-4	0	0	95-100	90-100	70-85	40-55	0-25	NP-10
		16-80	Stratified loamy sand to silt loam	CL, ML, SM	A-1, A-3, A-4, A-6	0	0	95-100	70-100	35-95	5-80	0-40	NP-15
Hapludolls-----	5	0-9	Loam	CL, CL-ML	A-4, A-6	0	0-3	95-100	95-100	90-100	75-100	20-40	5-15
		9-60	Clay loam, silt loam, loam	CL, CL-ML, SC, SC-SM	A-4, A-6	0-1	0-5	95-100	80-100	55-100	35-90	20-40	5-20
Hapludalfs-----	2	0-6	Fine sandy loam	SC-SM, CL-ML	A-4	0	0-3	95-100	85-100	70-85	35-55	20-30	5-10
		6-8	Fine sand, loamy fine sand, fine sandy loam	SM, ML	A-2, A-4	0	0-3	95-100	85-100	70-90	30-50	15-25	NP-5
		8-25	Loam, clay loam, silty clay loam	CL	A-6	0	0-5	95-100	85-100	75-100	50-95	25-40	10-20
		25-80	Fine sandy loam, loam, silt loam	CL-ML, CL, SC	A-4, A-6	0-1	0-5	95-100	85-100	70-100	35-90	20-35	5-15
Zell-----	2	0-6	Silt loam	ML	A-4	0	0	100	95-100	90-100	80-100	30-40	NP-10
		6-26	Silt loam, very fine sandy loam, loam	CL-ML, ML	A-4	0	0	100	100	90-100	85-95	0-30	NP-10
		26-60	Loamy very fine sand, very fine sand, very fine sandy loam	SM, ML, CL-ML	A-4	0	0	100	100	85-100	45-90	0-30	NP-10

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
			In			Pct	Pct					Pct	
I14D: Fairdale-----	85	0-7	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	90-100	60-90	20-40	5-15
		7-48	Stratified very fine sandy loam to silty clay loam	CL, CL-ML, ML	A-4, A-6	0	0	100	100	85-100	55-90	20-40	NP-20
		48-67	Silty clay loam, fine sandy loam, silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	70-100	50-90	20-40	5-15
		67-80	Stratified very fine sandy loam to silty clay loam	CL, CL-ML, ML	A-4, A-6	0	0	100	100	85-100	55-90	20-40	NP-20
Fluvaquents-----	6	0-16	Fine sandy loam	SC-SM, SM, ML, CL-ML	A-4	0	0	95-100	90-100	70-85	40-55	0-25	NP-10
		16-80	Stratified loamy sand to silt loam	CL, ML, SM	A-1, A-3, A-4, A-6	0	0	95-100	70-100	35-95	5-80	0-40	NP-15
Hapludolls-----	4	0-9	Loam	CL, CL-ML	A-4, A-6	0	0-3	95-100	95-100	90-100	75-100	20-40	5-15
		9-60	Clay loam, silt loam, loam	CL, CL-ML, SC, SC-SM	A-4, A-6	0-1	0-5	95-100	80-100	55-100	35-90	20-40	5-20
Zell-----	3	0-6	Silt loam	ML	A-4	0	0	100	95-100	90-100	80-100	30-40	NP-10
		6-26	Silt loam, very fine sandy loam, loam	CL-ML, ML	A-4	0	0	100	100	90-100	85-95	0-30	NP-10
		26-60	Loamy very fine sand, very fine sand, very fine sandy loam	SM, ML, CL-ML	A-4	0	0	100	100	85-100	45-90	0-30	NP-10
Hapludalfs-----	2	0-6	Fine sandy loam	SC-SM, CL-ML	A-4	0	0-3	95-100	85-100	70-85	35-55	20-30	5-10
		6-8	Fine sand, loamy fine sand, fine sandy loam	SM, ML	A-2, A-4	0	0-3	95-100	85-100	70-90	30-50	15-25	NP-5
		8-25	Loam, clay loam, silty clay loam	CL	A-6	0	0-5	95-100	85-100	75-100	50-95	25-40	10-20
		25-80	Fine sandy loam, loam, silt loam	CL-ML, CL, SC	A-4, A-6	0-1	0-5	95-100	85-100	70-100	35-90	20-35	5-15

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I15A:													
Flaming-----	70	0-12	Loamy fine sand	SM, SC-SM	A-2-4	0	0	100	95-100	65-80	15-30	0-20	NP-5
		12-17	Fine sand, loamy sand, sand	SM, SW-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-30	0-20	NP-3
		17-27	Fine sand, loamy sand, sand	SM, SW-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-30	0-20	NP-3
		27-60	Fine sand, loamy sand, sand	SM, SW-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-30	0-20	NP-3
Garborg-----	10	0-12	Loamy fine sand	SC-SM, SM	A-2-4	0	0	100	95-100	50-80	15-35	0-20	NP-5
		12-41	Loamy fine sand, loamy sand, fine sand	SC-SM, SM, SP-SM	A-2-4	0	0	100	95-100	50-80	10-35	0-20	NP-3
		41-59	Fine sand, loamy sand, loamy fine sand	SC-SM, SM, SP-SM	A-3, A-2-4	0	0	100	95-100	50-80	5-35	0-20	NP-3
		59-80	Fine sand, loamy sand, loamy fine sand	SC-SM, SM, SP-SM	A-2-4	0	0	100	95-100	50-80	5-35	0-20	NP-3
Hamar-----	5	0-12	Loamy fine sand	SM, SC-SM	A-2-4	0	0	100	95-100	50-80	15-35	0-20	NP-5
		12-17	Loamy fine sand, loamy sand, fine sand	SC-SM, SM, SP-SM	A-2-4	0	0	100	95-100	50-80	10-35	0-20	NP-3
		17-40	Fine sand, loamy sand, loamy fine sand	SC-SM, SM, SP-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-35	0-20	NP-3
		40-47	Loamy fine sand	SC-SM, SM	A-2-4	0	0	100	95-100	50-80	15-35	0-20	NP-5
		47-60	Fine sand, loamy sand, loamy fine sand	SC-SM, SM, SP-SM	A-3, A-2-4	0	0	100	95-100	50-80	5-35	0-20	NP-3

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I15A: Ulen-----	5	0-9	Fine sandy loam	SC, SC-SM, SM	A-4	0	0	100	100	80-100	35-50	0-25	NP-10
		9-42	Fine sandy loam, sandy loam, loamy fine sand	SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	15-25	NP-10
		42-60	Fine sand, sand	SM, SP-SM	A-2, A-3, A-1	0	0	85-100	75-95	45-75	5-25	0-20	NP-3
Poppleton-----	3	0-6	Fine sand	SM, SC-SM	A-2-4	0	0	95-100	95-100	65-80	15-30	0-20	NP-5
		6-9	Fine sand, sand	SM	A-2-4, A-3	0	0	100	100	80-95	5-15	0-20	NP-3
		9-40	Fine sand, sand	SM	A-2-4, A-3	0	0	100	100	80-95	5-15	0-20	NP-3
		40-60	Fine sand, sand	SM	A-2-4, A-3	0	0	100	100	80-95	5-15	0-20	NP-3
Sandberg-----	3	0-12	Loamy sand	SM, SP-SM	A-1, A-2	0	0-5	85-100	50-95	40-75	10-25	0-20	NP-5
		12-19	Gravelly loamy coarse sand, gravelly coarse sand, loamy sand	SM, SP-SM	A-1, A-2, A-3	0	0-5	60-95	50-95	35-70	5-25	0-20	NP-3
		19-29	Gravelly coarse sand, coarse sand, sand	SP, SP-SM, SW-SM	A-1, A-2, A-3	0	0-5	50-95	40-95	30-65	0-10	0-20	NP-3
		29-80	Gravelly coarse sand, coarse sand, sand	SP, SP-SM, SW-SM	A-1, A-2, A-3	0	0-5	50-95	40-95	30-65	0-10	0-20	NP-3
Foldahl-----	2	0-12	Loamy fine sand	SM, SC-SM	A-2-4	0	0	100	95-100	65-85	15-30	0-20	NP-5
		12-30	Fine sand, loamy fine sand, sand	SM, SW-SM, SP-SM	A-2-4, A-3	0	0-2	95-100	90-100	50-80	5-30	0-20	NP-3
		30-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Radium-----	2	0-14	Loamy sand	SM, SW-SM	A-2-4	0	0	95-100	95-100	50-70	5-25	0-20	NP-5
		14-33	Sand, loamy sand, gravelly loamy coarse sand	SM, SP, SP-SM	A-1, A-2, A-3	0	0-5	75-100	65-95	35-60	3-15	0-20	NP-3
		33-43	Gravelly sand, gravelly coarse sand, very gravelly coarse sand	GW, GW-GM, SP, SP-SM	A-1	0	0-5	45-90	30-75	15-40	0-10	0-20	NP-3
		43-80	Sand, coarse sand, loamy sand	SM, SW-SM, SP-SM	A-1, A-2, A-3	0	0-5	85-100	75-95	40-75	5-20	0-20	NP-3

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I16F: Fluvaquents-----	55	0-16	Fine sandy loam	SC-SM, SM, ML, CL-ML	A-4	0	0	95-100	90-100	70-85	40-55	0-25	NP-10
		16-80	Stratified loamy sand to silt loam	CL, ML, SM	A-1, A-3, A-4, A-6	0	0	95-100	70-100	35-95	5-80	0-40	NP-15
Hapludolls-----	25	0-9	Loam	CL, CL-ML	A-4, A-6	0	0-3	95-100	95-100	90-100	75-100	20-40	5-15
		9-60	Clay loam, silt loam, loam	CL, CL-ML, SC, SC-SM	A-4, A-6	0-1	0-5	95-100	80-100	55-100	35-90	20-40	5-20
Hapludalfs-----	7	0-6	Fine sandy loam	SC-SM, CL-ML	A-4	0	0-3	95-100	85-100	70-85	35-55	20-30	5-10
		6-8	Fine sand, loamy fine sand, fine sandy loam	SM, ML	A-2, A-4	0	0-3	95-100	85-100	70-90	30-50	15-25	NP-5
		8-25	Loam, clay loam, silty clay loam	CL	A-6	0	0-5	95-100	85-100	75-100	50-95	25-40	10-20
		25-80	Fine sandy loam, loam, silt loam	CL-ML, CL, SC	A-4, A-6	0-1	0-5	95-100	85-100	70-100	35-90	20-35	5-15
Fairdale-----	5	0-7	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	90-100	60-90	20-40	5-15
		7-48	Stratified very fine sandy loam to silty clay loam	CL, CL-ML, ML	A-4, A-6	0	0	100	100	85-100	55-90	20-40	NP-20
		48-67	Silty clay loam, fine sandy loam, silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	70-100	50-90	20-40	5-15
		67-80	Stratified very fine sandy loam to silty clay loam	CL, CL-ML, ML	A-4, A-6	0	0	100	100	85-100	55-90	20-40	NP-20
Water-----	5	---	---	---	---	---	---	---	---	---	---	---	---
Bowstring-----	2	0-38	Muck	PT	A-8	0	0	100	100	---	---	---	---
		38-47	Stratified sand to fine sandy loam	SC-SM, SM, SP-SM	A-2	0	0	100	100	50-85	10-35	15-20	NP-5
		47-80	Muck	PT	A-8	0	0	100	100	---	---	---	---

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
			In			Pct	Pct					Pct	
I16F: Rauville-----	1	0-27	Silty clay loam	CL	A-6	0	0	100	100	90-100	85-100	25-40	10-20
		27-45	Silty clay loam, silt loam	CL	A-6	0	0	100	100	90-100	85-100	25-40	10-20
		45-60	Stratified gravelly loamy sand to clay loam	CL, ML, SM	A-1, A-3, A-4, A-6	0	0	95-100	70-100	35-95	5-80	0-40	NP-15
I17A: Foldahl-----	75	0-12	Fine sandy loam	SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-90	20-50	0-25	NP-10
		12-30	Fine sand, loamy fine sand, sand	SM, SP-SM, SW-SM	A-2-4, A-3	0	0-2	95-100	90-100	50-80	5-30	0-20	NP-3
		30-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Kratka-----	10	0-11	Fine sandy loam	SC-SM, SM	A-4	0	0	95-100	90-100	50-80	35-50	0-25	NP-10
		11-18	Loamy sand, sand, loamy fine sand	SW-SM, SP-SM, SM	A-2-4, A-3	0	0	95-100	90-100	50-80	5-35	0-20	NP-3
		18-25	Loamy sand, sand, fine sand	SM, SP-SM, SW-SM	A-2-4, A-2, A-3	0	0	95-100	90-100	50-80	5-35	0-20	NP-3
		25-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Roliss-----	5	0-14	Loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	80-100	80-100	60-90	20-40	5-20
		14-20	Clay loam, loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		20-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Flaming-----	4	0-12	Loamy fine sand	SM, SC-SM	A-2-4	0	0	100	95-100	65-80	15-30	0-20	NP-5
		12-17	Fine sand, loamy sand, sand	SM, SW-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-30	0-20	NP-3
		17-27	Fine sand, loamy sand, sand	SM, SW-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-30	0-20	NP-3
		27-60	Fine sand, loamy sand, sand	SM, SW-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-30	0-20	NP-3

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I17A:													
Grimstad-----	2	0-9	Fine sandy loam	SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-90	20-50	0-30	NP-10
		9-22	Loamy sand, loamy fine sand, fine sand	SM, SC-SM	A-2-4, A-4	0	0	100	95-100	65-85	15-50	15-25	NP-10
		22-28	Loamy sand, loamy fine sand, fine sand	SM, SW-SM	A-2, A-2-4, A-3	0	0	100	95-100	80-90	5-35	0-20	NP-3
		28-60	Loam, clay loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Linveltdt-----	2	0-9	Fine sandy loam	SC-SM, SM	A-2-4, A-4	0	0-5	95-100	95-100	65-90	20-50	0-25	NP-10
		9-16	Sandy clay loam, loam, sandy loam	CL, CL-ML, SC, SC-SM	A-2-4, A-4	0-1	0-5	95-100	80-100	50-90	25-75	20-30	5-10
		16-29	Loamy sand, sand, coarse sand	SC-SM, SM, SP-SM	A-1, A-2, A-3	0-1	0-5	65-100	55-100	30-80	5-30	0-20	NP-3
		29-45	Clay loam, loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		45-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Eckvoll-----	1	0-9	Loamy fine sand	SC-SM, SM	A-2	0-1	0-2	90-100	85-100	65-80	15-30	0-20	NP-5
		9-25	Fine sand, sand, loamy fine sand	SP-SM, SM	A-1, A-2, A-3	0	0-2	95-100	95-100	45-75	5-30	0-20	NP-3
		25-32	Clay loam, sandy clay loam, loam	CL, SC	A-6	0	0-5	90-100	75-100	60-95	45-75	25-40	10-20
		32-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Strathcona-----	1	0-10	Fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0	0	95-100	90-100	70-85	40-55	0-25	NP-10
		10-17	Fine sandy loam, sandy loam, loamy fine sand	SM, SC-SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	20-30	NP-10
		17-28	Sand, fine sand, loamy fine sand	SM, SP-SM	A-2-4, A-3, A-2	0	0-1	95-100	85-100	60-80	3-30	0-20	NP-3
		28-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I18A:													
Foldahl-----	75	0-12	Loamy fine sand	SM, SC-SM	A-2-4	0	0	100	95-100	65-85	15-30	0-20	NP-5
		12-30	Fine sand, loamy fine sand, sand	SM, SW-SM, SP-SM	A-2-4, A-3	0	0-2	95-100	90-100	50-80	5-30	0-20	NP-3
		30-80	Clay loam, loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Kratka-----	10	0-11	Fine sandy loam	SC-SM, SM	A-4	0	0	95-100	90-100	50-80	35-50	0-25	NP-10
		11-18	Loamy sand, sand, loamy fine sand	SW-SM, SP-SM, SM	A-2-4, A-3	0	0	95-100	90-100	50-80	5-35	0-20	NP-3
		18-25	Loamy sand, sand, fine sand	SM, SP-SM, SW-SM	A-2, A-3, A-2-4	0	0	95-100	90-100	50-80	5-35	0-20	NP-3
		25-80	Clay loam, loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Roliss-----	5	0-14	Loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	80-100	80-100	60-90	20-40	5-20
		14-20	Clay loam, loam	CL-ML, CL	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		20-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Flaming-----	4	0-12	Loamy fine sand	SM, SC-SM	A-2-4	0	0	100	95-100	65-80	15-30	0-20	NP-5
		12-17	Fine sand, loamy sand, sand	SM, SW-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-30	0-20	NP-3
		17-27	Fine sand, loamy sand, sand	SM, SW-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-30	0-20	NP-3
		27-60	Fine sand, loamy sand, sand	SM, SW-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-30	0-20	NP-3
Grimstad-----	2	0-9	Fine sandy loam	SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-90	20-50	0-30	NP-10
		9-22	Loamy sand, loamy fine sand, fine sand	SM, SC-SM	A-2-4, A-4	0	0	100	95-100	65-85	15-50	15-25	NP-10
		22-28	Loamy sand, loamy fine sand, fine sand	SM, SW-SM	A-2, A-2-4, A-3	0	0	100	95-100	80-90	5-35	0-20	NP-3
		28-60	Clay loam, loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I18A: Linveltdt-----	2	0-9	Fine sandy loam	SC-SM, SM	A-2-4, A-4	0	0-5	95-100	95-100	65-90	20-50	0-25	NP-10
		9-16	Sandy clay loam, loam, sandy loam	CL, CL-ML, SC, SC-SM	A-2-4, A-4	0-1	0-5	95-100	80-100	50-90	25-75	20-30	5-10
		16-29	Loamy sand, sand, coarse sand	SC-SM, SM, SP-SM	A-1, A-2, A-3	0-1	0-5	65-100	55-100	30-80	5-30	0-20	NP-3
		29-45	Clay loam, loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		45-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Eckvoll-----	1	0-9	Loamy fine sand	SC-SM, SM	A-2-4	0-1	0-2	90-100	85-100	65-80	15-30	0-20	NP-5
		9-25	Fine sand, sand, loamy fine sand	SM, SP-SM	A-1, A-2-4, A-3	0	0-2	95-100	95-100	45-75	5-30	0-20	NP-3
		25-32	Clay loam, sandy clay loam, loam	CL, SC	A-6	0	0-5	90-100	75-100	60-95	45-75	25-40	10-20
		32-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Strathcona-----	1	0-10	Fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0	0	95-100	90-100	70-85	40-55	0-25	NP-10
		10-17	Fine sandy loam, sandy loam, loamy fine sand	SM, SC-SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	20-30	NP-10
		17-28	Sand, fine sand, loamy fine sand	SM, SP-SM	A-2, A-3, A-2-4	0	0-1	95-100	85-100	60-80	3-30	0-20	NP-3
		28-80	Clay loam, loam	CL-ML, CL	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
I19A: Foxhome-----	65	0-10	Sandy loam	SM	A-4	0	0-2	95-100	90-100	75-90	35-50	0-25	NP-10
		10-15	Fine sand, loamy sand, sand	SM, SW-SM	A-2, A-3	0	0-3	75-95	65-90	45-80	5-35	0-25	NP-5
		15-23	Very gravelly sand, very gravelly coarse sand, very gravelly loamy sand	GP, GP-GM, SP, SP-SM	A-1	0	2-5	30-65	15-45	5-40	0-10	0-20	NP-1
		23-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
			In			Pct	Pct					Pct	
<b>119A:</b>													
Kittson-----	10	0-10	Loam	CL, CL-ML	A-4, A-6	0	0	100	95-100	85-95	50-75	20-35	5-15
		10-17	Loam, fine sandy loam, sandy loam	CL, SC	A-4	0	0-5	90-100	65-100	55-90	35-75	20-35	5-10
		17-36	Clay loam, loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		36-60	Clay loam, loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Strandquist----	10	0-10	Loam	CL-ML, CL	A-4	0	0	95-100	80-100	75-90	50-75	20-30	5-10
		10-20	Gravelly sand, gravelly coarse sand, very gravelly sand	GP, GP-GM, SP, SP-SM, GW-GM	A-1	0	2-5	30-65	15-45	5-40	0-10	0-20	NP-3
		20-60	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Foldahl-----	5	0-12	Fine sandy loam	SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-90	20-50	0-25	NP-10
		12-30	Fine sand, loamy fine sand, sand	SM, SP-SM, SW-SM	A-2-4, A-3	0	0-2	95-100	90-100	50-80	5-30	0-20	NP-3
		30-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Grimstad-----	5	0-9	Fine sandy loam	SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-90	20-50	0-30	NP-10
		9-22	Loamy sand, loamy fine sand, fine sand	SM, SC-SM	A-2-4, A-4	0	0	100	95-100	65-85	15-50	15-25	NP-10
		22-28	Loamy sand, loamy fine sand, fine sand	SM, SW-SM	A-2, A-2-4, A-3	0	0	100	95-100	80-90	5-35	0-20	NP-3
		28-60	Loam, clay loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Roliss-----	3	0-14	Loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	80-100	80-100	60-90	20-40	5-20
		14-20	Clay loam, loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		20-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I19A: Mavie-----	2	0-12	Fine sandy loam	SC-SM, SM	A-4	0	0-3	95-100	90-100	50-80	35-50	0-25	NP-10
		12-18	Loam, fine sandy loam, sandy loam	SM, CL-ML, SC, SC-SM	A-4, A-6	0	0-5	95-100	85-100	65-95	15-75	20-35	NP-15
		18-39	Very gravelly coarse sand, very gravelly sand, very gravelly loamy sand	GP, GP-GM, SP, SP-SM	A-1	0	2-5	30-65	15-45	5-40	0-10	0-20	NP-3
		39-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
I20A: Foxlake-----	75	0-19	Loam	CL-ML, CL	A-4, A-6	0-1	0-2	95-100	90-100	75-90	50-80	20-40	5-20
		19-38	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
		38-49	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
		49-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Clearwater-----	5	0-8	Clay	CH, CL	A-7	0-1	0-1	95-100	95-100	90-100	70-95	45-70	20-50
		8-35	Clay, silty clay, silty clay loam	CH, CL	A-7	0-1	0-3	95-100	95-100	90-100	70-95	40-70	20-45
		35-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Foxlake, very cobbly-----	5	0-19	Loam	CL-ML, CL	A-4, A-6	1-3	1-10	95-100	90-100	75-90	50-80	20-40	5-20
		19-38	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
		38-49	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
		49-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
						Pct	Pct					Pct	
I20A:													
Augsburg-----	3	0-11	Loam	ML	A-4	0	0	100	100	95-100	70-95	20-40	NP-10
		11-18	Loam, very fine sandy loam, silt loam	ML, CL-ML	A-4	0	0	100	100	95-100	80-90	0-30	NP-10
		18-33	Loamy very fine sand, very fine sandy loam, loam, very fine sand	ML, CL-ML	A-4	0	0	100	100	95-100	75-90	0-30	NP-10
		33-60	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Clearwater, depressiona---	3	0-8	Mucky clay loam	CL	A-6	0	0-3	95-100	95-100	80-95	60-85	25-40	10-20
		8-35	Clay, silty clay, silty clay loam	CH, CL	A-7	0-1	0-1	95-100	95-100	90-100	70-95	40-70	20-45
		35-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Espelie-----	3	0-9	Fine sandy loam	CL, ML, SC, SM	A-2-4, A-4	0	0	95-100	85-100	60-85	9-65	0-25	NP-10
		9-24	Loamy sand, loamy fine sand, fine sand	SM, SP-SM	A-2, A-3, A-1, A-2-4	0	0-5	85-100	60-100	30-80	5-40	0-20	NP-3
		24-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Hilaire-----	2	0-10	Fine sandy loam	SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-90	20-50	0-25	NP-10
		10-34	Loamy sand, fine sand, loamy fine sand, sand	SM, SP-SM	A-1, A-2-4, A-3	0	0-5	85-100	75-100	45-85	5-40	0-20	NP-3
		34-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I20A:													
Reis-----	2	0-9	Clay	CH, CL	A-7	0-1	0-1	95-100	95-100	90-100	70-95	45-70	20-50
		9-17	Clay, silty clay	CH, CL	A-7	0-1	0-3	95-100	95-100	90-100	70-95	45-75	20-50
		17-33	Clay, silty clay	CH, CL	A-7	0-1	0-3	95-100	95-100	90-100	70-95	45-75	20-50
		33-42	Clay, silty clay	CH, CL	A-7	0-1	0-3	95-100	95-100	90-100	70-95	45-75	20-50
		42-60	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
		60-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Wheatville-----	2	0-9	Very fine sandy loam	CL, CL-ML, ML	A-4	0	0	100	100	90-100	50-95	15-35	NP-10
		9-31	Silt loam, very fine sandy loam, loam	CL-ML, ML, CL	A-4	0	0	100	100	90-100	85-95	0-30	NP-10
		31-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
I21A:													
Fram-----	85	0-7	Loam	ML	A-4	0-1	0-5	95-100	95-100	85-100	60-90	20-40	NP-10
		7-38	Sandy loam, fine sandy loam, loam	SM, ML	A-4	0-1	0-5	95-100	90-100	60-100	35-90	20-40	NP-10
		38-60	Sandy loam, fine sandy loam, loam	SM, ML	A-4	0-1	0-5	95-100	90-100	60-100	35-90	20-40	NP-10
Hedman-----	12	0-11	Loam	ML	A-4	0-1	0-5	95-100	80-100	75-90	50-70	20-35	NP-10
		11-20	Sandy loam, fine sandy loam, loam	ML, SM	A-4	0-1	0-5	95-100	90-100	60-100	35-90	20-40	NP-10
		20-80	Sandy loam, fine sandy loam, loam	SM, ML	A-4	0-1	0-5	95-100	90-100	60-100	35-90	20-40	NP-10

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I21A: Strathcona-----	2	0-10	Fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0	0	95-100	90-100	70-85	40-55	0-25	NP-10
		10-17	Fine sandy loam, sandy loam, loamy fine sand	SM, SC-SM	A-4, A-2-4	0	0	95-100	95-100	65-85	15-50	20-30	NP-10
		17-28	Sand, fine sand, loamy fine sand	SM, SP-SM	A-2, A-3, A-2-4	0	0-1	95-100	90-100	50-80	5-30	0-20	NP-3
		28-80	Sandy loam, fine sandy loam, loam	SM, ML	A-4	0-1	0-5	95-100	90-100	60-100	35-90	20-40	NP-10
Foxhome-----	1	0-10	Sandy loam	SM	A-4	0	0-2	95-100	90-100	75-90	35-50	0-25	NP-10
		10-15	Fine sand, loamy sand, sand	SM, SW-SM	A-2-4, A-3	0	0-3	75-95	65-90	45-80	5-35	0-25	NP-5
		15-23	Very gravelly sand, very gravelly coarse sand, very gravelly loamy sand	GP, GP-GM, SP, SP-SM	A-1	0	2-5	30-65	15-45	5-40	0-10	0-20	NP-1
		23-80	Sandy loam, fine sandy loam, loam	SM, ML	A-4	0-1	0-5	95-100	90-100	60-100	35-90	20-40	NP-10
I22A: Glyndon-----	75	0-11	Loam	ML	A-4	0	0	100	100	95-100	70-95	20-40	NP-10
		11-28	Silt loam, very fine sandy loam, loam	CL-ML, ML	A-4	0	0	100	100	90-100	85-95	0-30	NP-10
		28-60	Loamy very fine sand, very fine sand, very fine sandy loam	SM, ML, CL-ML	A-4	0	0	100	100	85-100	45-90	0-30	NP-10

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
			In			Pct	Pct					Pct	
<b>I22A:</b>													
Borup-----	10	0-12	Loam	ML	A-4	0	0	100	100	95-100	70-95	20-40	NP-10
		12-34	Very fine sandy loam, silt loam, loamy very fine sand	CL-ML, ML	A-4	0	0	100	100	90-100	50-95	0-30	NP-10
		34-60	Loamy very fine sand, very fine sand, very fine sandy loam	CL-ML, ML	A-4	0	0	100	100	85-100	35-90	0-30	NP-10
Augsburg-----	5	0-11	Loam	ML	A-4	0	0	100	100	95-100	70-95	20-40	NP-10
		11-18	Loam, very fine sandy loam, silt loam	ML, CL-ML	A-4	0	0	100	100	95-100	80-90	0-30	NP-10
		18-33	Loamy very fine sand, very fine sandy loam, loam, very fine sand	ML, CL-ML	A-4	0	0	100	100	95-100	75-90	0-30	NP-10
		33-60	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Ulen-----	5	0-9	Fine sandy loam	SC, SC-SM, SM	A-4	0	0	100	100	80-100	35-50	0-25	NP-10
		9-42	Fine sandy loam, sandy loam, loamy fine sand	SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	15-25	NP-10
		42-60	Fine sand, sand	SM, SP-SM	A-2, A-3, A-1	0	0	85-100	75-95	45-75	5-25	0-20	NP-3
Wheatville-----	3	0-9	Very fine sandy loam	CL, CL-ML, ML	A-4	0	0	100	100	90-100	50-95	15-35	NP-10
		9-31	Silt loam, very fine sandy loam, loam	CL-ML, ML, CL	A-4	0	0	100	100	90-100	85-95	0-30	NP-10
		31-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
			In			Pct	Pct					Pct	
I22A: Flaming-----	2	0-12	Loamy fine sand	SM, SC-SM	A-2-4	0	0	100	95-100	65-80	15-30	0-20	NP-5
		12-17	Fine sand, loamy sand, sand	SM, SW-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-30	0-20	NP-3
		17-27	Fine sand, loamy sand, sand	SM, SW-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-30	0-20	NP-3
		27-60	Fine sand, loamy sand, sand	SM, SW-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-30	0-20	NP-3
I23A: Glyndon-----	75	0-11	Very fine sandy loam	CL, CL-ML, ML	A-4	0	0	100	100	95-100	50-90	20-30	NP-10
		11-28	Silt loam, very fine sandy loam, loam	CL-ML, ML	A-4	0	0	100	100	90-100	85-95	0-30	NP-10
		28-60	Loamy very fine sand, very fine sand, very fine sandy loam	CL-ML, ML, SM	A-4	0	0	100	100	85-100	45-90	0-30	NP-10
Borup-----	10	0-12	Very fine sandy loam	CL, CL-ML, ML	A-4	0	0	100	100	95-100	50-90	20-30	NP-10
		12-34	Very fine sandy loam, silt loam, loamy very fine sand	CL-ML, ML	A-4	0	0	100	100	90-100	50-95	0-30	NP-10
		34-60	Loamy very fine sand, very fine sand, very fine sandy loam	ML, CL-ML	A-4	0	0	100	100	85-100	35-90	0-30	NP-10

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I23A: Augsburg-----	5	0-11	Loam	ML	A-4	0	0	100	100	95-100	70-95	20-40	NP-10
		11-18	Loam, very fine sandy loam, silt loam	ML, CL-ML	A-4	0	0	100	100	95-100	80-90	0-30	NP-10
		18-33	Loamy very fine sand, very fine sandy loam, loam, very fine sand	ML, CL-ML	A-4	0	0	100	100	95-100	75-90	0-30	NP-10
		33-60	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Ulen-----	5	0-9	Loamy fine sand	SM	A-2-4	0	0	100	95-100	50-80	15-30	0-20	NP-5
		9-42	Fine sandy loam, sandy loam, loamy fine sand	SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	15-25	NP-10
		42-60	Fine sand, sand	SM, SP-SM	A-1, A-2, A-3	0	0	85-100	75-95	45-75	5-25	0-20	NP-3
Wheatville-----	3	0-9	Very fine sandy loam	CL, CL-ML, ML	A-4	0	0	100	100	90-100	50-95	15-35	NP-10
		9-31	Silt loam, very fine sandy loam, loam	CL-ML, ML, CL	A-4	0	0	100	100	90-100	85-95	0-30	NP-10
		31-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Flaming-----	2	0-12	Loamy fine sand	SM, SC-SM	A-2-4	0	0	100	95-100	65-80	15-30	0-20	NP-5
		12-17	Fine sand, loamy sand, sand	SM, SW-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-30	0-20	NP-3
		17-27	Fine sand, loamy sand, sand	SM, SW-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-30	0-20	NP-3
		27-60	Fine sand, loamy sand, sand	SM, SW-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-30	0-20	NP-3

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I24A:													
Grimstad-----	70	0-9	Fine sandy loam	SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-90	20-50	0-30	NP-10
		9-22	Loamy sand, loamy fine sand, fine sand	SM, SC-SM	A-2-4, A-4	0	0	100	95-100	65-85	15-50	15-25	NP-10
		22-28	Loamy sand, loamy fine sand, fine sand	SM, SW-SM	A-2, A-2-4, A-3	0	0	100	95-100	80-90	5-35	0-20	NP-3
		28-60	Loam, clay loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Strathcona-----	12	0-10	Fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0	0	95-100	90-100	70-85	40-55	0-25	NP-10
		10-17	Fine sandy loam, sandy loam, loamy fine sand	SM, SC-SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	20-30	NP-10
		17-28	Sand, fine sand, loamy fine sand	SM, SP-SM	A-2, A-3, A-2-4	0	0-1	95-100	90-100	50-80	5-30	0-20	NP-3
		28-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Foldahl-----	5	0-12	Fine sandy loam	SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-90	20-50	0-25	NP-10
		12-30	Fine sand, loamy fine sand, sand	SM, SP-SM, SW-SM	A-2-4, A-3	0	0-2	95-100	90-100	50-80	5-30	0-20	NP-3
		30-80	Clay loam, loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Hamerly-----	5	0-8	Loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	90-100	80-95	60-90	20-40	5-20
		8-25	Loam, clay loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		25-60	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Foxhome-----	2	0-10	Sandy loam	SM	A-4	0	0-2	95-100	90-100	75-90	35-50	0-25	NP-10
		10-15	Fine sand, loamy fine sand, sand	SM, SW-SM	A-2-4, A-3	0	0-3	75-95	65-90	45-80	5-35	0-25	NP-5
		15-23	Very gravelly sand, very gravelly coarse sand, very gravelly loamy sand	GP, GP-GM, SP, SP-SM	A-1	0	2-5	30-65	15-45	5-40	0-10	0-20	NP-1
		23-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I24A:													
Karlsruhe-----	2	0-15	Sandy loam	SM, SC, SC-SM	A-4, A-2	0	0-3	95-100	85-100	55-90	15-50	0-25	NP-10
		15-30	Sandy loam, loamy sand	SM, SC, SC-SM	A-2, A-4, A-1	0	0-3	95-100	85-100	45-75	10-40	0-25	NP-10
		30-60	Coarse sand, gravelly coarse sand, gravelly sand	GP-GM, SP, SM, GP, SP-SM	A-1, A-2, A-3	0	0-5	45-90	30-80	20-70	0-15	0-20	NP-1
Mavie-----	2	0-12	Fine sandy loam	SC-SM, SM	A-4	0	0-3	95-100	90-100	50-80	35-50	0-25	NP-10
		12-18	Loam, fine sandy loam, sandy loam	SM, CL-ML, SC, SC-SM	A-4, A-6	0	0-5	95-100	85-100	65-95	15-75	20-35	NP-15
		18-39	Very gravelly coarse sand, very gravelly sand, very gravelly loamy sand	GP, GP-GM, SP, SP-SM	A-1	0	2-5	30-65	15-45	5-40	0-10	0-20	NP-3
		39-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Ulen-----	2	0-9	Fine sandy loam	SC, SC-SM, SM	A-4	0	0	100	100	80-100	35-50	0-25	NP-10
		9-42	Fine sandy loam, sandy loam, loamy fine sand	SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	15-25	NP-10
		42-60	Fine sand, sand	SM, SP-SM	A-1, A-2, A-3	0	0	85-100	75-95	45-75	5-25	0-20	NP-3
I25A:													
Hamar-----	75	0-12	Loamy fine sand	SM, SC-SM	A-2-4	0	0	100	95-100	50-80	15-35	0-20	NP-5
		12-17	Loamy fine sand, loamy sand, fine sand	SC-SM, SM, SP-SM	A-2-4	0	0	100	95-100	50-80	10-35	0-20	NP-3
		17-40	Fine sand, loamy sand, loamy fine sand	SC-SM, SM, SP-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-35	0-20	NP-3
		40-47	Loamy fine sand	SC-SM, SM	A-2-4	0	0	100	95-100	50-80	15-35	0-20	NP-5
		47-60	Fine sand, loamy sand, loamy fine sand	SC-SM, SM, SP-SM	A-3, A-2-4	0	0	100	95-100	50-80	5-35	0-20	NP-3

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
			In			Pct	Pct					Pct	
I25A: Garborg-----	10	0-12	Loamy fine sand	SC-SM, SM	A-2-4	0	0	100	95-100	50-80	15-35	0-20	NP-5
		12-41	Loamy fine sand, loamy sand, fine sand	SC-SM, SM, SP-SM	A-2-4	0	0	100	95-100	50-80	10-35	0-20	NP-3
		41-59	Fine sand, loamy sand, loamy fine sand	SC-SM, SM, SP-SM	A-3, A-2-4	0	0	100	95-100	50-80	5-35	0-20	NP-3
		59-80	Fine sand, loamy sand, loamy fine sand	SC-SM, SM, SP-SM	A-2-4	0	0	100	95-100	50-80	5-35	0-20	NP-3
Rosewood-----	7	0-8	Fine sandy loam	SC, SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-90	30-50	0-25	NP-10
		8-18	Fine sandy loam, sandy loam, loamy fine sand	SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	20-30	NP-10
		18-80	Fine sand, sand	SM, SP-SM	A-1, A-2-4, A-3	0	0	85-100	75-100	45-75	5-35	0-20	NP-3
Venlo-----	3	0-13	Fine sandy loam	SC-SM, SM	A-2-4, A-4	0	0	100	95-100	50-85	30-50	0-25	NP-5
		13-60	Fine sand, loamy sand, loamy fine sand	SC-SM, SM, SP-SM	A-3, A-2-4	0	0	100	95-100	50-80	5-35	0-20	NP-3
Flaming-----	2	0-12	Loamy fine sand	SM, SC-SM	A-2-4	0	0	100	95-100	65-80	15-30	0-20	NP-5
		12-17	Fine sand, loamy sand, sand	SM, SW-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-30	0-20	NP-3
		17-27	Fine sand, loamy sand, sand	SM, SW-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-30	0-20	NP-3
		27-60	Fine sand, loamy sand, sand	SM, SW-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-30	0-20	NP-3

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In			Pct	Pct					Pct		
<b>I25A:</b>													
Hangaard-----	2	0-10	Sandy loam	SM	A-2-4, A-4	0	0-3	95-100	80-100	50-75	15-45	0-25	NP-10
		10-15	Loamy sand, coarse sandy loam, loamy coarse sand	SM, SP-SM	A-1, A-2-4, A-3	0	0-3	95-100	80-95	40-70	5-25	0-20	NP-5
		15-80	Gravelly coarse sand, gravelly sand, coarse sand	SP, SP-SM	A-1, A-2, A-3	0	0-3	70-95	55-90	30-60	0-10	0-20	NP-3
Kratka-----	1	0-11	Fine sandy loam	SC-SM, SM	A-4	0	0	95-100	90-100	50-80	35-50	0-25	NP-10
		11-18	Loamy sand, sand, loamy fine sand	SW-SM, SP-SM, SM	A-2-4, A-3	0	0	95-100	90-100	50-80	5-35	0-20	NP-3
		18-25	Loamy sand, sand, fine sand	SM, SP-SM, SW-SM	A-2-4, A-2, A-3	0	0	95-100	90-100	50-80	5-35	0-20	NP-3
		25-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
<b>I26A:</b>													
Hamerly-----	75	0-8	Loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	90-100	80-95	60-90	20-40	5-20
		8-25	Clay loam, loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		25-60	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Vallers-----	12	0-12	Loam	CL-ML, CL	A-4	0-1	0-2	95-100	90-100	80-90	50-80	20-40	5-20
		12-21	Loam, clay loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		21-60	Clay loam, loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Foxhome-----	3	0-10	Sandy loam	SM	A-4	0	0-2	95-100	90-100	75-90	35-50	0-25	NP-10
		10-15	Fine sand, loamy sand, sand	SM, SW-SM	A-2, A-3	0	0-3	75-95	65-90	45-80	5-35	0-25	NP-5
		15-23	Very gravelly sand, very gravelly coarse sand, very gravelly loamy sand	GP, GP-GM, SP, SP-SM	A-1	0	2-5	30-65	15-45	5-40	0-10	0-20	NP-1
		23-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
					Pct	Pct					Pct		
I26A:													
Grimstad-----	3	0-9	Fine sandy loam	SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-90	20-50	0-30	NP-10
		9-22	Loamy sand, loamy fine sand, fine sand	SM, SC-SM	A-2-4, A-4	0	0	100	95-100	65-85	15-50	15-25	NP-10
		22-28	Loamy sand, loamy fine sand, fine sand	SM, SW-SM	A-2, A-2-4, A-3	0	0	100	95-100	80-90	5-35	0-20	NP-3
		28-60	Loam, clay loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Hamerly, very cobbly-----													
	3	0-8	Loam	CL, CL-ML	A-4, A-6	1-3	1-10	95-100	90-100	80-95	60-90	20-40	5-20
		8-25	Clay loam, loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		25-60	Clay loam, loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Strathcona-----													
	3	0-10	Fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0	0	95-100	90-100	70-85	40-55	0-25	NP-10
		10-17	Fine sandy loam, sandy loam, loamy fine sand	SM, SC-SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	20-30	NP-10
		17-28	Sand, fine sand, loamy fine sand	SM, SP-SM	A-2, A-3, A-2-4	0	0-1	95-100	90-100	50-80	5-30	0-20	NP-3
		28-80	Clay loam, loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Roliss, depressional---													
	1	0-14	Loam	CL, CL-ML	A-4, A-6	0-1	0-1	95-100	85-95	80-95	60-85	20-40	5-20
		14-20	Clay loam, loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		20-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
I27A:													
Hamre-----	80	0-13	Muck	PT	A-8	0	0	100	100	---	---	---	---
		13-18	Loam, clay loam, silt loam	CL, CL-ML	A-4, A-6	0-1	0-3	90-100	80-100	70-100	50-90	25-40	5-20
		18-71	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		71-80	Clay loam, loam	CL-ML, CL	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I27A:													
Northwood-----	5	0-9	Muck	PT	A-8	0	0	100	100	---	---	---	---
		9-14	Fine sandy loam, loamy fine sand, loamy sand	SC-SM, SM	A-2, A-4, A-2-4	0	0-3	95-100	90-100	50-85	15-50	0-25	NP-10
		14-24	Coarse sand, fine sand, loamy fine sand	SM, SP-SM	A-2, A-3, A-2-4	0	0-3	95-100	80-100	70-95	5-35	0-15	NP-3
		24-80	Loam, clay loam	CL-ML, CL	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Roliss-----	5	0-14	Loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	80-100	80-100	60-90	20-40	5-20
		14-20	Clay loam, loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		20-80	Clay loam, loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Smiley-----	5	0-12	Loam	CL, CL-ML, ML	A-4, A-6	0-1	0-2	95-100	85-100	70-95	50-80	15-35	2-12
		12-19	Clay loam, loam, silty clay loam	CL	A-6	0-1	0-3	95-100	85-100	70-95	50-80	25-40	10-20
		19-42	Clay loam, loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		42-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Cathro-----	3	0-11	Muck	PT	A-8	0	0	100	100	---	---	---	---
		11-23	Muck	PT	A-8	0	0	100	100	---	---	---	---
		23-60	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Kratka-----	2	0-11	Fine sandy loam	SC-SM, SM	A-4	0	0	95-100	90-100	50-80	35-50	0-25	NP-10
		11-18	Loamy sand, sand, loamy fine sand	SW-SM, SP-SM, SM	A-2-4, A-3	0	0	95-100	90-100	50-80	5-35	0-20	NP-3
		18-25	Loamy sand, sand, fine sand	SM, SP-SM, SW-SM	A-2-4, A-2, A-3	0	0	95-100	90-100	50-80	5-35	0-20	NP-3
		25-80	Clay loam, loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
					Pct	Pct					Pct		
I28A:													
Hangaard-----	75	0-10	Sandy loam	SM	A-2-4, A-4	0	0-3	95-100	80-100	50-75	15-45	0-25	NP-10
		10-15	Loamy sand, coarse sandy loam, loamy coarse sand	SM, SP-SM	A-1, A-2-4, A-3	0	0-3	95-100	80-95	40-70	5-25	0-20	NP-5
		15-80	Gravelly coarse sand, gravelly sand, coarse sand	SP, SP-SM	A-1, A-2, A-3	0	0-3	70-95	55-90	30-60	0-10	0-20	NP-3
Hamar-----	7	0-12	Loamy fine sand	SM, SC-SM	A-2-4	0	0	100	95-100	50-80	15-35	0-20	NP-5
		12-17	Loamy fine sand, loamy sand, fine sand	SC-SM, SM, SP-SM	A-2-4	0	0	100	95-100	50-80	10-35	0-20	NP-3
		17-40	Fine sand, loamy sand, loamy fine sand	SC-SM, SM, SP-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-35	0-20	NP-3
		40-47	Loamy fine sand	SC-SM, SM	A-2-4	0	0	100	95-100	50-80	15-35	0-20	NP-5
		47-60	Fine sand, loamy sand, loamy fine sand	SC-SM, SM, SP-SM	A-3, A-2-4	0	0	100	95-100	50-80	5-35	0-20	NP-3
Syrene-----	7	0-9	Sandy loam	SC-SM, SM	A-4	0-1	0-3	95-100	80-100	60-75	20-45	0-25	NP-10
		9-17	Loam, sandy loam, sandy clay loam	CL-ML, SC-SM, CL, SC	A-4	0	0-5	95-100	85-100	50-75	15-65	20-35	5-15
		17-27	Stratified loamy fine sand to gravelly coarse sand	SP, SP-SM	A-1, A-2, A-3	0-1	0-5	70-95	55-80	30-60	0-10	0-20	NP-3
		27-60	Stratified loamy fine sand to gravelly coarse sand	SP, SP-SM	A-1, A-2, A-3	0-1	0-5	70-95	55-80	30-60	0-10	0-20	NP-3

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I28A:													
Karlsruhe-----	3	0-15	Sandy loam	SM, SC, SC-SM	A-4, A-2	0	0-3	95-100	85-100	55-90	15-50	0-25	NP-10
		15-30	Sandy loam, loamy sand	SM, SC, SC-SM	A-2, A-4, A-1	0	0-3	95-100	85-100	45-75	10-40	0-25	NP-10
		30-60	Coarse sand, gravelly coarse sand, gravelly sand	GP-GM, SP, SM, GP, SP-SM	A-1, A-2, A-3	0	0-5	45-90	30-80	20-70	0-15	0-20	NP-1
Rosewood-----	3	0-8	Fine sandy loam	SC-SM, SM, SC	A-2-4, A-4	0	0	95-100	95-100	65-90	30-50	0-25	NP-10
		8-18	Fine sandy loam, sandy loam, loamy fine sand	SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	20-30	NP-10
		18-80	Fine sand, sand	SM, SP-SM	A-1, A-2-4, A-3	0	0	85-100	75-100	45-75	5-35	0-20	NP-3
Strandquist-----	3	0-10	Loam	CL-ML, CL	A-4	0	0	95-100	80-100	75-90	50-75	20-30	5-10
		10-20	Gravelly sand, gravelly coarse sand, very gravelly sand	GP, GP-GM, SP, SP-SM, GW-GM	A-1	0	2-5	30-65	15-45	5-40	0-10	0-20	NP-3
		20-60	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Deerwood-----	2	0-10	Muck	PT	A-8	0	0	100	100	---	---	---	---
		10-12	Fine sand, loamy sand, fine sandy loam	SM, SC-SM	A-2-4, A-4	0	0-2	95-100	90-100	50-75	15-50	0-25	NP-10
		12-60	Fine sand, sand, gravelly sand	SM, SP, SP-SM	A-2-4, A-3, A-1	0	0-5	75-100	55-100	35-70	0-25	0-20	NP-3
I29A:													
Hattie-----	75	0-8	Clay	CH, CL	A-7	0-1	0-1	95-100	95-100	90-100	70-95	45-70	20-50
		8-22	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
		22-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I29A:													
Clearwater-----	12	0-8	Clay	CH, CL	A-7	0-1	0-1	95-100	95-100	90-100	70-95	45-70	20-50
		8-35	Clay, silty clay, silty clay loam	CH, CL	A-7	0-1	0-3	95-100	95-100	90-100	70-95	40-70	20-45
		35-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Reis-----	6	0-9	Clay	CH, CL	A-7	0-1	0-1	95-100	95-100	90-100	70-95	45-70	20-50
		9-17	Clay, silty clay	CH, CL	A-7	0-1	0-3	95-100	95-100	90-100	70-95	45-75	20-50
		17-33	Clay, silty clay	CH, CL	A-7	0-1	0-3	95-100	95-100	90-100	70-95	45-75	20-50
		33-42	Clay, silty clay	CH, CL	A-7	0-1	0-3	95-100	95-100	90-100	70-95	45-75	20-50
		42-60	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
		60-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Hattie, very cobbly-----	5	0-8	Clay	CH, CL	A-7	1-3	1-10	95-100	95-100	90-100	70-95	45-70	20-50
		8-22	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
		22-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Hilaire-----	2	0-10	Fine sandy loam	SM, CL, SC, ML	A-2-4, A-4	0	0	90-100	75-100	50-85	30-55	0-25	NP-10
		10-34	Fine sand, loamy fine sand, sand	SM, SP-SM	A-1, A-3, A-2-4	0	0-5	85-100	75-100	45-85	5-40	0-20	NP-3
		34-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I29D:													
Hattie-----	85	0-8	Clay	CL, CH	A-7	0-1	0-1	95-100	95-100	90-100	70-95	45-70	20-50
		8-22	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
		22-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Clearwater-----	6	0-8	Clay	CH, CL	A-7	0-1	0-1	95-100	95-100	90-100	70-95	45-70	20-50
		8-35	Clay, silty clay, silty clay loam	CH, CL	A-7	0-1	0-3	95-100	95-100	90-100	70-95	40-70	20-45
		35-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Hattie, level---	5	0-8	Clay	CH, CL	A-7	0-1	0-1	95-100	95-100	90-100	70-95	45-70	20-50
		8-22	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
		22-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Boyerlake-----	4	0-7	Silty clay	CH, CL	A-7	0-1	0-1	95-100	95-100	90-100	70-95	45-70	20-50
		7-37	Clay, silty clay	CH, CL	A-7	0-1	0-3	95-100	95-100	90-100	70-95	45-75	20-50
		37-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
I30A:													
Hedman-----	85	0-11	Loam	ML	A-4	0-1	0-5	95-100	80-100	75-90	50-70	20-35	NP-10
		11-20	Sandy loam, fine sandy loam, loam	ML, SM	A-4	0-1	0-5	95-100	90-100	60-100	35-90	20-40	NP-10
		20-80	Sandy loam, fine sandy loam, loam	ML, SM	A-4	0-1	0-5	95-100	90-100	60-100	35-90	20-40	NP-10

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
					Pct	Pct					Pct		
I30A:													
Fram-----	5	0-7	Loam	ML	A-4	0-1	0-5	95-100	95-100	85-100	60-90	20-40	NP-10
		7-38	Sandy loam, fine sandy loam, loam	SM, ML	A-4	0-1	0-5	95-100	90-100	60-100	35-90	20-40	NP-10
		38-60	Sandy loam, fine sandy loam, loam	ML, SM	A-4	0-1	0-5	95-100	90-100	60-100	35-90	20-40	NP-10
Strathcona-----	5	0-10	Fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0	0	95-100	90-100	70-85	40-55	0-25	NP-10
		10-17	Fine sandy loam, sandy loam, loamy fine sand	SM, SC-SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	20-30	NP-10
		17-28	Sand, fine sand, loamy fine sand	SM, SP-SM	A-3, A-2-4, A-2	0	0-1	95-100	90-100	50-80	5-30	0-20	NP-3
		28-80	Sandy loam, fine sandy loam, loam	SM, ML	A-4	0-1	0-5	95-100	90-100	60-100	35-90	20-40	NP-10
Haug-----	3	0-10	Muck	PT	A-8	0	0	100	100	---	---	---	---
		10-14	Mucky sandy loam, fine sandy loam, loam	OL, CL-ML, ML, SM, SC-SM	A-4	0-1	0-3	95-100	90-100	70-85	35-65	15-30	NP-10
		14-60	Sandy loam, fine sandy loam, loam	SM, ML	A-4	0-1	0-5	95-100	90-100	60-100	35-90	20-40	NP-10
Strandquist-----	2	0-10	Loam	CL-ML, CL	A-4	0	0	95-100	80-100	75-90	50-75	20-30	5-10
		10-20	Gravelly sand, gravelly coarse sand, very gravelly sand	GP, GP-GM, SP, SP-SM, GW-GM	A-1	0	2-5	30-65	15-45	5-40	0-10	0-20	NP-3
		20-60	Sandy loam, fine sandy loam, loam	SM, ML	A-4	0-1	0-5	95-100	90-100	60-100	35-90	20-40	NP-10

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I31A:													
Hedman-----	50	0-11	Loam	ML	A-4	0-1	0-5	95-100	80-100	75-90	50-70	20-35	NP-10
		11-20	Sandy loam, fine sandy loam, loam	ML, SM	A-4	0-1	0-5	95-100	90-100	60-100	35-90	20-40	NP-10
		20-80	Sandy loam, fine sandy loam, loam	ML, SM	A-4	0-1	0-5	95-100	90-100	60-100	35-90	20-40	NP-10
Fram-----	40	0-7	Loam	ML	A-4	0-1	0-5	95-100	95-100	85-100	60-90	20-40	NP-10
		7-38	Sandy loam, fine sandy loam, loam	SM, ML	A-4	0-1	0-5	95-100	90-100	60-100	35-90	20-40	NP-10
		38-60	Sandy loam, fine sandy loam, loam	SM, ML	A-4	0-1	0-5	95-100	90-100	60-100	35-90	20-40	NP-10
Strathcona-----	5	0-10	Fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0	0	95-100	90-100	70-85	40-55	0-25	NP-10
		10-17	Fine sandy loam, sandy loam, loamy fine sand	SM, SC-SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	20-30	NP-10
		17-28	Sand, fine sand, loamy fine sand	SM, SP-SM	A-3, A-2-4, A-2	0	0-1	95-100	90-100	50-80	5-30	0-20	NP-3
		28-80	Sandy loam, fine sandy loam, loam	SM, ML	A-4	0-1	0-5	95-100	90-100	60-100	35-90	20-40	NP-10
Haug-----	3	0-10	Muck	PT	A-8	0	0	100	100	---	---	---	---
		10-14	Mucky sandy loam, fine sandy loam, loam	OL, CL-ML, ML, SM, SC-SM	A-4	0-1	0-3	95-100	90-100	70-85	35-65	15-30	NP-10
		14-60	Sandy loam, fine sandy loam, loam	ML, SM	A-4	0-1	0-5	95-100	90-100	60-100	35-90	20-40	NP-10

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
			In			Pct	Pct					Pct	
I31A: Strandquist-----	2	0-10	Loam	CL-ML, CL	A-4	0	0	95-100	80-100	75-90	50-75	20-30	5-10
		10-20	Gravelly sand, gravelly coarse sand, very gravelly sand	GP, GP-GM, SP, SP-SM, GW-GM	A-1	0	2-5	30-65	15-45	5-40	0-10	0-20	NP-3
		20-60	Sandy loam, fine sandy loam, loam	SM, ML	A-4	0-1	0-5	95-100	90-100	60-100	35-90	20-40	NP-10
I32A: Hilaire-----	75	0-10	Fine sandy loam	SM, CL, SC, ML	A-2-4, A-4	0	0	90-100	75-100	50-85	30-55	0-25	NP-10
		10-34	Fine sand, loamy fine sand, sand	SM, SP-SM	A-1, A-3, A-2-4	0	0-5	85-100	75-100	45-85	5-40	0-20	NP-3
		34-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Espelie-----	12	0-9	Fine sandy loam	CL, ML, SC, SM	A-2-4, A-4	0	0	95-100	85-100	60-85	30-65	0-25	NP-10
		9-24	Loamy sand, loamy fine sand, fine sand	SM, SP-SM	A-2, A-3, A-1, A-2-4	0	0-5	85-100	60-100	30-80	5-40	0-20	NP-3
		24-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Huot-----	5	0-14	Fine sandy loam	SM, SC-SM	A-4	0	0	90-100	75-100	50-85	25-55	0-30	NP-10
		14-26	Loamy fine sand, fine sandy loam	SM, SC-SM	A-2-4, A-4	0	0	95-100	95-100	60-85	25-55	15-25	NP-10
		26-34	Loamy fine sand, fine sand	SP-SM, SM	A-2-4, A-3, A-2	0	0	90-100	75-100	50-80	5-35	0-20	NP-3
		34-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I32A: Flaming-----	2	0-12	Loamy fine sand	SM, SC-SM	A-2-4	0	0	100	95-100	65-80	15-30	0-20	NP-5
		12-17	Fine sand, loamy sand, sand	SM, SW-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-30	0-20	NP-3
		17-27	Fine sand, loamy sand, sand	SM, SW-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-30	0-20	NP-3
		27-60	Fine sand, loamy sand, sand	SM, SW-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-30	0-20	NP-3
Foxlake-----	2	0-19	Loam	CL-ML, CL	A-4, A-6	0-1	0-2	95-100	90-100	75-90	50-80	20-40	5-20
		19-38	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
		38-49	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
		49-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Wheatville-----	2	0-9	Very fine sandy loam	CL, CL-ML, ML	A-4	0	0	100	100	90-100	50-95	15-35	NP-10
		9-31	Silt loam, very fine sandy loam, loam	CL-ML, ML, CL	A-4	0	0	100	100	90-100	85-95	0-30	NP-10
		31-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Thiefriever-----	1	0-12	Fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0	0	95-100	80-100	70-90	35-55	0-25	NP-10
		12-23	Fine sandy loam, sandy loam, loamy fine sand	SM, SC-SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	20-30	NP-10
		23-32	Fine sand, loamy fine sand, loamy sand	SM, SP-SM	A-2-4, A-2, A-3	0	0-3	90-100	80-100	50-80	5-35	0-20	NP-3
		32-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
					Pct	Pct					Pct		
<b>I32A:</b>													
Wyandotte-----	1	In											
		0-8	Clay loam	CL	A-6	0-1	0-3	95-100	85-100	70-95	50-70	30-40	10-15
		8-15	Loam, sandy clay loam	CL, CL-ML	A-4	0	0-3	95-100	80-95	60-90	50-65	20-35	5-10
		15-34	Gravelly loamy coarse sand, gravelly sand, very gravelly loamy coarse sand	GP-GM, GP, SP-SM, SP	A-1	0	2-5	20-65	15-45	5-40	0-10	0-20	NP-3
		34-60	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
<b>I33A:</b>													
Hilaire-----	75	0-10	Loamy fine sand	SM, SC-SM	A-2-4	0	0	100	95-100	65-85	15-30	0-20	NP-5
		10-34	Fine sand, loamy fine sand, sand	SM, SP-SM	A-1, A-3, A-2-4	0	0-5	85-100	75-100	45-85	5-40	0-20	NP-3
		34-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Espelie-----	12	0-9	Fine sandy loam	CL, ML, SC, SM	A-2-4, A-4	0	0	95-100	85-100	60-85	30-65	0-25	NP-10
		9-24	Loamy sand, loamy fine sand, fine sand	SM, SP-SM	A-2-4, A-2, A-3, A-1	0	0-5	85-100	60-100	30-80	5-40	0-20	NP-3
		24-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Huot-----	5	0-14	Fine sandy loam	SM, SC-SM	A-4	0	0	90-100	75-100	50-85	25-55	0-30	NP-10
		14-26	Loamy fine sand, fine sandy loam	SM, SC-SM	A-2-4, A-4	0	0	95-100	95-100	60-85	25-55	15-25	NP-10
		26-34	Loamy fine sand, fine sand	SP-SM, SM	A-2-4, A-3, A-2	0	0	90-100	75-100	50-80	5-35	0-20	NP-3
		34-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I33A: Flaming-----	2	0-12	Loamy fine sand	SM, SC-SM	A-2-4	0	0	100	95-100	65-80	15-30	0-20	NP-5
		12-17	Fine sand, loamy sand, sand	SM, SW-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-30	0-20	NP-3
		17-27	Fine sand, loamy sand, sand	SM, SW-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-30	0-20	NP-3
		27-60	Fine sand, loamy sand, sand	SM, SW-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-30	0-20	NP-3
Foxlake-----	2	0-19	Loam	CL-ML, CL	A-4, A-6	0-1	0-2	95-100	90-100	75-90	50-80	20-40	5-20
		19-38	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
		38-49	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
		49-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Wheatville-----	2	0-9	Very fine sandy loam	CL, CL-ML, ML	A-4	0	0	100	100	90-100	50-95	15-35	NP-10
		9-31	Silt loam, very fine sandy loam, loam	CL-ML, ML, CL	A-4	0	0	100	100	90-100	85-95	0-30	NP-10
		31-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Thiefriever-----	1	0-12	Fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0	0	95-100	80-100	70-90	35-55	0-25	NP-10
		12-23	Fine sandy loam, sandy loam, loamy fine sand	SM, SC-SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	20-30	NP-10
		23-32	Fine sand, loamy fine sand, loamy sand	SM, SP-SM	A-2-4, A-2, A-3	0	0-3	90-100	80-100	50-80	5-35	0-20	NP-3
		32-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I33A: Wyandotte-----	1	0-8	Clay loam	CL	A-6	0-1	0-3	95-100	85-100	70-95	50-70	30-40	10-15
		8-15	Loam, sandy clay loam	CL, CL-ML	A-4	0	0-3	95-100	80-95	60-90	50-65	20-35	5-10
		15-34	Gravelly loamy coarse sand, gravelly sand, very gravelly loamy coarse sand	GP-GM, GP, SP-SM, SP	A-1	0	2-5	20-65	15-45	5-40	0-10	0-20	NP-3
		34-60	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
I34A: Huot-----	75	0-14	Fine sandy loam	SM, SC-SM	A-4	0	0	90-100	75-100	50-85	25-55	0-30	NP-10
		14-26	Loamy fine sand, fine sandy loam	SM, SC-SM	A-2-4, A-4	0	0	95-100	95-100	60-85	25-55	15-25	NP-10
		26-34	Loamy fine sand, fine sand	SP-SM, SM	A-2-4, A-3, A-2	0	0	90-100	75-100	50-80	5-35	0-20	NP-3
		34-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Thiefriever-----	12	0-12	Fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0	0	95-100	80-100	70-90	35-55	0-25	NP-10
		12-23	Fine sandy loam, sandy loam, loamy fine sand	SM, SC-SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	20-30	NP-10
		23-32	Fine sand, loamy fine sand, loamy sand	SM, SP-SM	A-2-4, A-2, A-3	0	0-3	90-100	80-100	50-80	5-35	0-20	NP-3
		32-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I34A: Hilaire-----	5	0-10	Fine sandy loam	SM, CL, SC, ML	A-2-4, A-4	0	0	90-100	75-100	50-85	30-55	0-25	NP-10
		10-34	Fine sand, loamy fine sand, sand	SM, SP-SM	A-1, A-3, A-2-4	0	0-5	85-100	75-100	45-85	5-40	0-20	NP-3
		34-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Flaming-----	3	0-12	Loamy fine sand	SM, SC-SM	A-2-4	0	0	100	95-100	65-80	15-30	0-20	NP-5
		12-17	Fine sand, loamy sand, sand	SM, SW-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-30	0-20	NP-3
		17-27	Fine sand, loamy sand, sand	SM, SW-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-30	0-20	NP-3
		27-60	Fine sand, loamy sand, sand	SM, SW-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-30	0-20	NP-3
Foxlake-----	3	0-19	Loam	CL-ML, CL	A-4, A-6	0-1	0-2	95-100	90-100	75-90	50-80	20-40	5-20
		19-38	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
		38-49	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
		49-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Ulen-----	2	0-9	Fine sandy loam	SC, SC-SM, SM	A-4	0	0	100	100	80-100	35-50	0-25	NP-10
		9-42	Fine sandy loam, sandy loam, loamy fine sand	SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	15-25	NP-10
		42-60	Fine sand, sand	SM, SP-SM	A-1, A-2, A-3	0	0	85-100	75-95	45-75	5-25	0-20	NP-3

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
					Pct	Pct					Pct		
I35A:													
Karlsruhe-----	70	0-15	Sandy loam	SM, SC, SC-SM	A-4, A-2	0	0-3	95-100	85-100	55-90	15-50	0-25	NP-10
		15-30	Sandy loam, loamy sand	SM, SC, SC-SM	A-2, A-4, A-1	0	0-3	95-100	85-100	45-75	10-40	0-25	NP-10
		30-60	Coarse sand, gravelly coarse sand, gravelly sand	GP-GM, SP, SM, GP, SP-SM	A-1, A-2, A-3	0	0-5	45-90	30-80	20-70	0-15	0-20	NP-1
Syrene-----	10	0-9	Sandy loam	SC-SM, SM	A-4	0-1	0-3	95-100	80-100	60-75	20-45	0-25	NP-10
		9-17	Loam, sandy loam, sandy clay loam	CL-ML, SC-SM, CL, SC	A-4	0	0-5	95-100	85-100	50-75	15-65	20-35	5-15
		17-27	Stratified loamy fine sand to gravelly coarse sand	SP, SP-SM	A-1, A-2, A-3	0-1	0-5	70-95	55-80	30-60	0-10	0-20	NP-3
		27-60	Stratified loamy fine sand to gravelly coarse sand	SP, SP-SM	A-1, A-2, A-3	0-1	0-5	70-95	55-80	30-60	0-10	0-20	NP-3
Ulen-----	10	0-9	Loamy fine sand	SM	A-2-4	0	0	100	95-100	50-80	15-30	0-20	NP-5
		9-42	Fine sandy loam, sandy loam, loamy fine sand	SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	15-25	NP-10
		42-60	Fine sand, sand	SM, SP-SM	A-1, A-2, A-3	0	0	85-100	75-95	45-75	5-25	0-20	NP-3
Radium-----	5	0-14	Loamy sand	SM, SW-SM	A-2-4	0	0	95-100	95-100	50-70	5-25	0-20	NP-5
		14-33	Sand, loamy sand, gravelly loamy coarse sand	SM, SP, SP-SM	A-1, A-2, A-3	0	0-5	75-100	65-95	35-60	3-15	0-20	NP-3
		33-43	Gravelly sand, gravelly coarse sand, very gravelly coarse sand	GW, GW-GM, SP, SP-SM	A-1	0	0-5	45-90	30-75	15-40	0-10	0-20	NP-3
		43-80	Sand, coarse sand, loamy sand	SM, SW-SM, SP-SM	A-1, A-2, A-3	0	0-5	85-100	75-95	40-75	5-20	0-20	NP-3

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I35A: Rosewood-----	3	0-8	Fine sandy loam	SC, SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-90	30-50	0-25	NP-10
		8-18	Fine sandy loam, sandy loam, loamy fine sand	SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	20-30	NP-10
		18-80	Fine sand, sand	SM, SP-SM	A-1, A-2-4, A-3	0	0	85-100	75-100	45-75	5-35	0-20	NP-3
Sandberg-----	2	0-12	Loamy sand	SM, SP-SM	A-1, A-2-4	0	0-5	85-100	50-95	40-75	10-25	0-20	NP-5
		12-19	Gravelly loamy coarse sand, gravelly coarse sand, loamy sand	SM, SP-SM	A-1, A-2, A-3	0	0-5	60-95	50-95	35-70	5-25	0-20	NP-3
		19-29	Gravelly coarse sand, coarse sand, sand	SP, SP-SM, SW-SM	A-1, A-2, A-3	0	0-5	50-95	40-95	30-65	0-10	0-20	NP-3
		29-80	Gravelly coarse sand, coarse sand, sand	SP, SP-SM, SW-SM	A-1, A-2, A-3	0	0-5	50-95	40-95	30-65	0-10	0-20	NP-3
I36A: Kittson-----	70	0-10	Loam	CL, CL-ML	A-4, A-6	0	0	100	95-100	85-95	50-75	20-35	5-15
		10-17	Loam, fine sandy loam, sandy loam	CL, SC	A-4	0	0-5	90-100	65-100	55-90	35-75	20-35	5-10
		17-36	Loam, clay loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		36-60	Clay loam, loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Roliss-----	12	0-14	Loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	80-100	80-100	60-90	20-40	5-20
		14-20	Clay loam, loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		20-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Hamerly-----	5	0-8	Loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	90-100	80-95	60-90	20-40	5-20
		8-25	Clay loam, loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		25-60	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I36A:													
Kratka-----	5	0-11	Fine sandy loam	SC-SM, SM	A-4	0	0	95-100	90-100	50-80	35-50	0-25	NP-10
		11-18	Loamy sand, sand, loamy fine sand	SW-SM, SP-SM, SM	A-2-4, A-3	0	0	95-100	90-100	50-80	5-35	0-20	NP-3
		18-25	Loamy sand, sand, fine sand	SM, SP-SM, SW-SM	A-2-4, A-2, A-3	0	0	95-100	90-100	50-80	5-35	0-20	NP-3
		25-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Grimstad-----	3	0-9	Fine sandy loam	SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-90	20-50	0-30	NP-10
		9-22	Loamy sand, loamy fine sand, fine sand	SM, SC-SM	A-2-4, A-4	0	0	100	95-100	65-85	15-50	15-25	NP-10
		22-28	Loamy sand, loamy fine sand, fine sand	SM, SW-SM	A-2, A-2-4, A-3	0	0	100	95-100	80-90	5-35	0-20	NP-3
		28-60	Loam, clay loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Strandquist-----	3	0-10	Loam	CL-ML, CL	A-4	0	0	95-100	80-100	75-90	50-75	20-30	5-10
		10-20	Gravelly sand, gravelly coarse sand, very gravelly sand	GP, GP-GM, SP, SP-SM, GW-GM	A-1	0	2-5	30-65	15-45	5-40	0-10	0-20	NP-3
		20-60	Loam, clay loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Foxhome-----	2	0-10	Sandy loam	SM	A-4	0	0-2	95-100	90-100	75-90	35-50	0-25	NP-10
		10-15	Fine sand, loamy fine sand, sand	SW-SM, SM	A-2-4, A-3	0	0-3	75-95	65-90	45-80	5-35	0-25	NP-5
		15-23	Very gravelly sand, very gravelly coarse sand, very gravelly loamy sand	GP, GP-GM, SP, SP-SM	A-1	0	2-5	30-65	15-45	5-40	0-10	0-20	NP-1
		23-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I37A: Kratka, depressional---	45	0-11	Mucky fine sandy loam	SC-SM, SM, ML, CL-ML	A-4	0	0	95-100	90-100	70-85	40-55	0-25	NP-10
		11-18	Loamy sand, sand, loamy fine sand	SW-SM, SP-SM, SM	A-2-4, A-3	0	0	95-100	90-100	50-80	5-35	0-20	NP-3
		18-25	Loamy sand, sand, fine sand	SM, SP-SM, SW-SM	A-2-4, A-2, A-3	0	0	95-100	90-100	50-80	5-35	0-20	NP-3
		25-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Strathcona, depressional---	45	0-10	Mucky fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0	0	95-100	90-100	70-85	40-55	0-25	NP-10
		10-17	Fine sandy loam, sandy loam, loamy fine sand	SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	20-30	NP-10
		17-28	Sand, fine sand, loamy fine sand	SM, SP-SM	A-2-4, A-3, A-2	0	0-1	95-100	90-100	50-80	5-30	0-20	NP-3
		28-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Northwood-----	5	0-9	Muck	PT	A-8	0	0	100	100	---	---	---	---
		9-14	Fine sandy loam, loamy fine sand, loamy sand	SC-SM, SM	A-2, A-4, A-2-4	0	0-3	95-100	90-100	50-85	15-50	0-25	NP-10
		14-24	Coarse sand, fine sand, loamy fine sand	SM, SP-SM	A-2, A-3, A-2-4	0	0-3	95-100	80-100	70-95	5-35	0-15	NP-3
		24-80	Loam, clay loam	CL-ML, CL	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Kratka-----	2	0-11	Fine sandy loam	SC-SM, SM	A-4	0	0	95-100	90-100	50-80	35-50	0-25	NP-10
		11-18	Loamy sand, sand, loamy fine sand	SW-SM, SP-SM, SM	A-2-4, A-3	0	0	95-100	90-100	50-80	5-35	0-20	NP-3
		18-25	Loamy sand, sand, fine sand	SM, SP-SM, SW-SM	A-2-4, A-2, A-3	0	0	95-100	90-100	50-80	5-35	0-20	NP-3
		25-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I37A: Strathcona-----	2	0-10	Fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0	0	95-100	90-100	70-85	40-55	0-25	NP-10
		10-17	Fine sandy loam, sandy loam, loamy fine sand	SM, SC-SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	20-30	NP-10
		17-28	Sand, fine sand, loamy fine sand	SM, SP-SM	A-2-4, A-3, A-2	0	0-1	95-100	90-100	50-80	5-30	0-20	NP-3
		28-80	Clay loam, loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Roliss-----	1	0-14	Loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	80-100	80-100	60-90	20-40	5-20
		14-20	Clay loam, loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		20-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
I38A: Kratka-----	70	0-11	Fine sandy loam	SC-SM, SM	A-4	0	0	95-100	90-100	50-80	35-50	0-25	NP-10
		11-18	Loamy sand, sand, loamy fine sand	SW-SM, SP-SM, SM	A-2-4, A-3	0	0	95-100	90-100	50-80	5-35	0-20	NP-3
		18-25	Loamy sand, sand, fine sand	SM, SP-SM, SW-SM	A-2-4, A-2, A-3	0	0	95-100	90-100	50-80	5-35	0-20	NP-3
		25-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Smiley-----	7	0-12	Loam	CL, CL-ML, ML	A-4, A-6	0-1	0-2	95-100	85-100	70-95	50-80	15-35	2-12
		12-19	Clay loam, loam, silty clay loam	CL	A-6	0-1	0-3	95-100	85-100	70-95	50-80	25-40	10-20
		19-42	Clay loam, loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		42-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Foldahl-----	5	0-12	Fine sandy loam	SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-90	20-50	0-25	NP-10
		12-30	Fine sand, loamy fine sand, sand	SM, SP-SM, SW-SM	A-2-4, A-3	0	0-2	95-100	90-100	50-80	5-30	0-20	NP-3
		30-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I38A: Kratka, very cobbly-----	5	0-11	Fine sandy loam	SC-SM, SM	A-4	1-3	1-10	95-100	90-100	50-80	35-50	0-25	NP-10
		11-18	Loamy sand, sand, loamy fine sand	SW-SM, SP-SM, SM	A-2-4, A-3	0	0	95-100	90-100	50-80	5-35	0-20	NP-3
		18-25	Loamy sand, sand, fine sand	SM, SP-SM, SW-SM	A-2-4, A-2, A-3	0	0	95-100	90-100	50-80	5-35	0-20	NP-3
		25-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Strathcona-----	5	0-10	Fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0	0	95-100	90-100	70-85	40-55	0-25	NP-10
		10-17	Fine sandy loam, sandy loam, loamy fine sand	SM, SC-SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	20-30	NP-10
		17-28	Sand, fine sand, loamy fine sand	SM, SP-SM	A-2-4, A-3, A-2	0	0-1	95-100	90-100	50-80	5-30	0-20	NP-3
		28-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Kratka, depressional---	3	0-11	Mucky fine sandy loam	SC-SM, SM, ML, CL-ML	A-4	0	0	95-100	90-100	70-85	40-55	0-25	NP-10
		11-18	Loamy sand, sand, loamy fine sand	SW-SM, SP-SM, SM	A-2-4, A-3	0	0	95-100	90-100	50-80	5-35	0-20	NP-3
		18-25	Loamy sand, sand, fine sand	SM, SP-SM, SW-SM	A-2-4, A-2, A-3	0	0	95-100	90-100	50-80	5-35	0-20	NP-3
		25-80	Clay loam, loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Strandquist-----	3	0-10	Loam	CL-ML, CL	A-4	0	0	95-100	80-100	75-90	50-75	20-30	5-10
		10-20	Gravelly sand, gravelly coarse sand, very gravelly sand	GP, GP-GM, SP, SP-SM, GW-GM	A-1	0	2-5	30-65	15-45	5-40	0-10	0-20	NP-3
		20-60	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I38A: Linveltdt-----	2	0-9	Fine sandy loam	SC-SM, SM	A-2-4, A-4	0	0-5	95-100	95-100	65-90	20-50	0-25	NP-10
		9-16	Sandy clay loam, loam, sandy loam	CL, CL-ML, SC, SC-SM	A-2-4, A-4	0-1	0-5	95-100	80-100	50-90	25-75	20-30	5-10
		16-29	Loamy sand, sand, coarse sand	SC-SM, SM, SP-SM	A-1, A-2, A-3	0-1	0-5	65-100	55-100	30-80	5-30	0-20	NP-3
		29-45	Clay loam, loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		45-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
I39A: Linveltdt-----	65	0-9	Fine sandy loam	SC-SM, SM	A-2-4, A-4	0	0-5	95-100	95-100	65-90	20-50	0-25	NP-10
		9-16	Sandy clay loam, loam, sandy loam	CL, CL-ML, SC, SC-SM	A-2-4, A-4	0-1	0-5	95-100	80-100	50-90	25-75	20-30	5-10
		16-29	Loamy sand, sand, coarse sand	SC-SM, SM, SP-SM	A-1, A-2, A-3	0-1	0-5	65-100	55-100	30-80	5-30	0-20	NP-3
		29-45	Clay loam, loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		45-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Kratka-----	14	0-11	Fine sandy loam	SC-SM, SM	A-4	0	0	95-100	90-100	50-80	35-50	0-25	NP-10
		11-18	Loamy sand, sand, loamy fine sand	SW-SM, SP-SM, SM	A-2-4, A-3	0	0	95-100	90-100	50-80	5-35	0-20	NP-3
		18-25	Loamy sand, sand, fine sand	SM, SP-SM, SW-SM	A-2-4, A-2, A-3	0	0	95-100	90-100	50-80	5-35	0-20	NP-3
		25-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Reiner-----	10	0-7	Fine sandy loam	SC-SM, SM	A-4	0	0-5	85-100	85-95	65-85	35-50	15-35	NP-10
		7-17	Clay loam, loam, sandy clay loam	CL	A-6	0	0-3	85-100	75-100	60-95	55-80	25-40	10-20
		17-35	Loam, clay loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		35-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Smiley-----	5	0-12	Loam	CL, CL-ML, ML	A-4, A-6	0-1	0-2	95-100	85-100	70-95	50-80	15-35	2-12
		12-19	Clay loam, loam, silty clay loam	CL	A-6	0-1	0-3	95-100	85-100	70-95	50-80	25-40	10-20
		19-42	Clay loam, loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		42-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I39A:													
Eckvoll-----	3	0-9	Loamy fine sand	SM, SC-SM	A-2	0-1	0-2	90-100	85-100	65-80	15-30	0-20	NP-5
		9-25	Fine sand, sand, loamy fine sand	SM, SP-SM	A-1, A-2, A-3	0	0-2	95-100	95-100	45-75	5-30	0-20	NP-3
		25-32	Clay loam, sandy clay loam, loam	CL, SC	A-6	0	0-5	90-100	75-100	60-95	45-75	25-40	10-20
		32-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Foldahl-----	2	0-12	Fine sandy loam	SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-90	20-50	0-25	NP-10
		12-30	Fine sand, loamy fine sand, sand	SM, SP-SM, SW-SM	A-2-4, A-3	0	0-2	95-100	90-100	50-80	5-30	0-20	NP-3
		30-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Pelan-----	1	0-6	Sandy loam	SC-SM, SM	A-4	0	0-5	85-100	85-95	65-85	35-50	15-35	NP-10
		6-9	Fine sand, sand, loamy fine sand	SP-SM, SM	A-1, A-2, A-3	0	0-2	95-100	95-100	45-75	5-30	0-20	NP-3
		9-14	Very gravelly sandy loam, very gravelly sandy clay loam	SC, GC, SM, GM	A-1, A-2	0	2-5	45-85	25-50	10-45	5-35	20-30	NP-10
		14-20	Very gravelly sand, very gravelly coarse sand, very gravelly loamy sand	GP, GP-GM, SP, SP-SM	A-1	0	2-5	30-65	15-45	5-40	0-10	0-20	NP-3
		20-60	Clay loam, loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
I40B:													
Maddock-----	85	0-10	Loamy fine sand	SC-SM, SM	A-2-4	0	0	100	95-100	50-80	15-35	0-20	NP-5
		10-14	Loamy sand, loamy fine sand, fine sand	SM, SP-SM	A-2, A-3	0	0	100	95-100	60-100	5-35	0-20	NP-3
		14-60	Loamy fine sand, fine sand	SM, SP-SM	A-2, A-3	0	0	100	95-100	60-100	5-35	0-20	NP-3

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I40B: Flaming-----	5	0-12	Loamy fine sand	SM, SC-SM	A-2-4	0	0	100	95-100	65-80	15-30	0-20	NP-5
		12-17	Fine sand, loamy sand, sand	SM, SW-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-30	0-20	NP-3
		17-27	Fine sand, loamy sand, sand	SM, SW-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-30	0-20	NP-3
		27-60	Fine sand, loamy sand, sand	SM, SW-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-30	0-20	NP-3
Sandberg-----	5	0-12	Loamy sand	SM, SP-SM	A-1, A-2-4	0	0-5	85-100	50-95	40-75	10-25	0-20	NP-5
		12-19	Gravelly loamy coarse sand, gravelly coarse sand, loamy sand	SM, SP-SM	A-1, A-2, A-3	0	0-5	60-95	50-95	35-70	5-25	0-20	NP-3
		19-29	Gravelly coarse sand, coarse sand, sand	SP, SP-SM, SW-SM	A-1, A-2, A-3	0	0-5	50-95	40-95	30-65	0-10	0-20	NP-3
		29-80	Gravelly coarse sand, coarse sand, sand	SP, SP-SM, SW-SM	A-1, A-2, A-3	0	0-5	50-95	40-95	30-65	0-10	0-20	NP-3
Halverson-----	3	0-10	Loamy fine sand	SC-SM, SM	A-2-4	0	0	100	95-100	50-80	15-35	0-20	NP-5
		10-23	Loamy fine sand, fine sand, loamy sand	SC-SM, SM	A-2-4	0	0	100	95-100	80-95	15-40	0-20	NP-3
		23-35	Clay loam, sandy clay loam, loam	CL, SC	A-6	0	0-5	90-100	75-100	60-95	45-75	30-40	10-20
		35-55	Sandy loam, fine sandy loam, loam	SM, ML	A-4	0-1	0-5	95-100	90-100	60-100	35-90	20-40	NP-10
		55-80	Sandy loam, fine sandy loam, loam	SM, ML	A-4	0-1	0-5	95-100	90-100	60-100	35-90	20-40	NP-10

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I40B: Hamar-----	2	0-12	Loamy fine sand	SM, SC-SM	A-2-4	0	0	100	95-100	50-80	15-35	0-20	NP-5
		12-17	Loamy fine sand, loamy sand, fine sand	SC-SM, SM, SP-SM	A-2-4	0	0	100	95-100	50-80	10-35	0-20	NP-3
		17-40	Fine sand, loamy sand, loamy fine sand	SC-SM, SM, SP-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-35	0-20	NP-3
		40-47	Loamy fine sand	SC-SM, SM	A-2-4	0	0	100	95-100	50-80	15-35	0-20	NP-5
		47-60	Fine sand, loamy sand, loamy fine sand	SC-SM, SM, SP-SM	A-3, A-2-4	0	0	100	95-100	50-80	5-35	0-20	NP-3
I40F: Maddock-----	90	0-10	Loamy fine sand	SC-SM, SM	A-2-4	0	0	100	95-100	50-80	15-35	0-20	NP-5
		10-14	Loamy sand, loamy fine sand, fine sand	SM, SP-SM	A-2-4, A-3	0	0	100	95-100	60-100	5-35	0-20	NP-3
		14-60	Loamy sand, loamy fine sand, fine sand	SM, SP-SM	A-2-4, A-3	0	0	100	95-100	60-100	5-35	0-20	NP-3
Flaming-----	5	0-12	Loamy fine sand	SM, SC-SM	A-2-4	0	0	100	95-100	65-80	15-30	0-20	NP-5
		12-17	Fine sand, loamy sand, sand	SM, SW-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-30	0-20	NP-3
		17-27	Fine sand, loamy sand, sand	SM, SW-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-30	0-20	NP-3
		27-60	Fine sand, loamy sand, sand	SM, SW-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-30	0-20	NP-3

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In			Pct	Pct					Pct		
I40F: Sandberg-----	5	0-12	Loamy sand	SM, SP-SM	A-1, A-2-4	0	0-5	85-100	50-95	40-75	10-25	0-20	NP-5
		12-19	Gravelly loamy coarse sand, gravelly coarse sand, loamy sand	SM, SP-SM	A-1, A-2, A-3	0	0-5	60-95	50-95	35-70	5-25	0-20	NP-3
		19-29	Gravelly coarse sand, coarse sand	SP, SP-SM, SW-SM	A-1, A-2, A-3	0	0-5	50-95	40-95	30-65	0-10	0-20	NP-3
		29-80	Gravelly coarse sand, coarse sand, sand	SP, SP-SM, SW-SM	A-1, A-2, A-3	0	0-5	50-95	40-95	30-65	0-10	0-20	NP-3
I41A: Markey-----	80	0-32	Muck	PT	A-8	0	0	100	100	---	---	---	---
		32-60	Fine sand, loamy sand, coarse sand	SM, SP, SP-SM	A-2, A-3, A-2-4	0	0	100	75-100	60-75	0-20	0-20	NP-3
Deerwood-----	12	0-10	Muck	PT	A-8	0	0	100	100	---	---	---	---
		10-12	Fine sand, loamy sand, fine sandy loam	SM, SC-SM	A-4, A-2-4	0	0-2	95-100	90-100	50-75	15-50	0-25	NP-10
		12-60	Fine sand, sand, gravelly sand	SM, SP, SP-SM	A-1, A-2, A-3	0	0-5	75-100	55-100	35-70	0-25	0-20	NP-3
Berner-----	2	0-28	Muck	PT	A-8	0	0	100	100	---	---	---	---
		28-31	Sandy loam, fine sandy loam, gravelly sandy loam	SC, SC-SM, SM	A-2-4, A-2, A-4	0	0	90-100	70-100	50-85	10-50	15-25	NP-10
		31-44	Sand, loamy sand, gravelly sand	SP, SP-SM, SM	A-2-4, A-2, A-3	0	0	90-100	70-100	60-80	0-25	0-20	NP-3
		44-80	Clay loam, loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I41A: Hamar-----	2	0-12	Loamy fine sand	SM, SC-SM	A-2-4	0	0	100	95-100	50-80	15-35	0-20	NP-5
		12-17	Loamy fine sand, loamy sand, fine sand	SC-SM, SM, SP-SM	A-2-4	0	0	100	95-100	50-80	10-35	0-20	NP-3
		17-40	Fine sand, loamy sand, loamy fine sand	SC-SM, SM, SP-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-35	0-20	NP-3
		40-47	Loamy fine sand	SC-SM, SM	A-2-4	0	0	100	95-100	50-80	15-35	0-20	NP-5
		47-60	Fine sand, loamy sand, loamy fine sand	SC-SM, SM, SP-SM	A-3, A-2-4	0	0	100	95-100	50-80	5-35	0-20	NP-3
Seelyeville----	2	0-10	Muck	PT	A-8	0	0	100	100	---	---	---	---
		10-80	Muck, mucky peat	PT	A-8	0	0	100	100	---	---	---	---
Syrene-----	2	0-9	Sandy loam	SC-SM, SM	A-4	0-1	0-3	95-100	80-100	60-75	20-45	0-25	NP-10
		9-17	Loam, sandy loam, sandy clay loam	CL-ML, SC-SM, CL, SC	A-4	0	0-5	95-100	85-100	50-75	15-65	20-35	5-15
		17-27	Stratified loamy fine sand to gravelly coarse sand	SP, SP-SM	A-1, A-2, A-3	0-1	0-5	70-95	55-80	30-60	0-10	0-20	NP-3
		27-60	Stratified loamy fine sand to gravelly coarse sand	SP, SP-SM	A-1, A-2, A-3	0-1	0-5	70-95	55-80	30-60	0-10	0-20	NP-3
I42A: Markey, ponded--	85	0-32	Muck	PT	A-8	0	0	100	100	---	---	---	---
		32-60	Fine sand, loamy sand, coarse sand	SM, SP, SP-SM	A-2, A-3, A-2-4	0	0	100	75-100	60-75	0-20	0-20	NP-3

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I42A: Markey-----	5	0-32	Muck	PT	A-8	0	0	100	100	---	---	---	---
		32-60	Fine sand, loamy sand, coarse sand	SM, SP, SP-SM	A-2, A-3, A-2-4	0	0	100	75-100	60-75	0-20	0-20	NP-3
Deerwood-----	4	0-10	Muck	PT	A-8	0	0	100	100	---	---	---	---
		10-12	Fine sand, loamy sand, fine sandy loam	SM, SC-SM	A-2-4, A-4	0	0-2	95-100	90-100	50-75	15-50	0-25	NP-10
		12-60	Fine sand, sand, gravelly sand	SM, SP, SP-SM	A-1, A-2, A-3	0	0-5	75-100	55-100	35-70	0-25	0-20	NP-3
Seelyeville, ponded-----	4	0-10	Muck	PT	A-8	0	0	100	100	---	---	---	---
		10-80	Muck, mucky peat	PT	A-8	0	0	100	100	---	---	---	---
Hamar-----	1	0-12	Loamy fine sand	SM, SC-SM	A-2-4	0	0	100	95-100	50-80	15-35	0-20	NP-5
		12-17	Loamy fine sand, loamy sand, fine sand	SC-SM, SM, SP-SM	A-2-4	0	0	100	95-100	50-80	10-35	0-20	NP-3
		17-40	Fine sand, loamy sand, loamy fine sand	SC-SM, SM, SP-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-35	0-20	NP-3
		40-47	Loamy fine sand	SC-SM, SM	A-2-4	0	0	100	95-100	50-80	15-35	0-20	NP-5
		47-60	Fine sand, loamy sand, loamy fine sand	SC-SM, SM, SP-SM	A-3, A-2-4	0	0	100	95-100	50-80	5-35	0-20	NP-3
Hangaard-----	1	0-10	Sandy loam	SM	A-2-4, A-4	0	0-3	95-100	80-100	50-75	15-45	0-25	NP-10
		10-15	Loamy sand, coarse sandy loam, loamy coarse sand	SM, SP-SM	A-1, A-2-4, A-3	0	0-3	95-100	80-95	40-70	5-25	0-20	NP-5
		15-80	Gravelly coarse sand, gravelly sand, coarse sand	SP, SP-SM	A-1, A-2, A-3	0	0-3	70-95	55-90	30-60	0-10	0-20	NP-3

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth  In	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
I43A:						Pct	Pct					Pct	
Mavie-----	70	0-12	Fine sandy loam	SC-SM, SM	A-4	0	0-3	95-100	90-100	50-80	35-50	0-25	NP-10
		12-18	Loam, fine sandy loam, sandy loam	SM, CL-ML, SC, SC-SM	A-4, A-6	0	0-5	95-100	85-100	65-95	15-75	20-35	NP-15
		18-39	Very gravelly coarse sand, very gravelly sand, very gravelly loamy sand	GP, GP-GM, SP, SP-SM	A-1	0	2-5	30-65	15-45	5-40	0-10	0-20	NP-3
		39-80	Clay loam, loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Vallers-----	10	0-12	Loam	CL-ML, CL	A-4	0-1	0-2	95-100	90-100	80-90	50-80	20-40	5-20
		12-21	Clay loam, loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		21-60	Loam, clay loam	CL-ML, CL	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Strandquist----	7	0-10	Loam	CL-ML, CL	A-4	0	0	95-100	80-100	75-90	50-75	20-30	5-10
		10-20	Gravelly sand, gravelly coarse sand, very gravelly sand	GP, GP-GM, SP, SP-SM, GW-GM	A-1	0	2-5	30-65	15-45	5-40	0-10	0-20	NP-3
		20-60	Clay loam, loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Strathcona-----	5	0-10	Fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0	0	95-100	90-100	70-85	40-55	0-25	NP-10
		10-17	Fine sandy loam, sandy loam, loamy fine sand	SM, SC-SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	20-30	NP-10
		17-28	Sand, fine sand, loamy fine sand	SM, SP-SM	A-3, A-2, A-2-4	0	0-1	95-100	90-100	50-80	5-30	0-20	NP-3
		28-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I43A: Strathcona, depressional---	3	0-10	Mucky fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0	0	95-100	90-100	70-85	40-55	0-25	NP-10
		10-17	Fine sandy loam, sandy loam, loamy fine sand	SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	20-30	NP-10
		17-28	Sand, fine sand, loamy fine sand	SM, SP-SM	A-2-4, A-3, A-2	0	0-1	95-100	90-100	50-80	5-30	0-20	NP-3
		28-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Foxhome-----	2	0-10	Sandy loam	SM	A-4	0	0-2	95-100	90-100	75-90	35-50	0-25	NP-10
		10-15	Fine sand, loamy sand, sand	SM, SW-SM	A-2-4, A-3	0	0-3	75-95	65-90	45-80	5-35	0-25	NP-5
		15-23	Very gravelly sand, very gravelly coarse sand, very gravelly loamy sand	GP, GP-GM, SP, SP-SM	A-1	0	2-5	30-65	15-45	5-40	0-10	0-20	NP-1
		23-80	Clay loam, loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Karlsruhe-----	2	0-15	Sandy loam	SM, SC, SC-SM	A-4, A-2	0	0-3	95-100	85-100	55-90	15-50	0-25	NP-10
		15-30	Sandy loam, loamy sand	SM, SC, SC-SM	A-2, A-4, A-1	0	0-3	95-100	85-100	45-75	10-40	0-25	NP-10
		30-60	Coarse sand, gravelly coarse sand, gravelly sand	GP-GM, SP, SM, GP, SP-SM	A-1, A-2, A-3	0	0-5	45-90	30-80	20-70	0-15	0-20	NP-1
Grimstad-----	1	0-9	Fine sandy loam	SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-90	20-50	0-30	NP-10
		9-22	Loamy sand, loamy fine sand, fine sand	SM, SC-SM	A-2-4, A-4	0	0	100	95-100	65-85	15-50	15-25	NP-10
		22-28	Loamy sand, loamy fine sand, fine sand	SM, SW-SM	A-2, A-2-4, A-3	0	0	100	95-100	80-90	5-35	0-20	NP-3
		28-60	Loam, clay loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I44A:													
Newfolden-----	75	0-7	Loam	CL-ML	A-4, A-6	0	0	100	95-100	85-95	60-75	20-35	5-15
		7-16	Clay, silty clay, silty clay loam	CH, CL	A-7	0	0	100	100	90-100	75-95	40-65	20-40
		16-36	Clay loam, loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		36-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Smiley-----	12	0-12	Loam	CL, CL-ML, ML	A-4, A-6	0-1	0-2	95-100	85-100	70-95	50-80	15-35	2-12
		12-19	Clay loam, loam, silty clay loam	CL	A-6	0-1	0-3	95-100	85-100	70-95	50-80	25-40	10-20
		19-42	Clay loam, loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		42-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Boash-----	8	0-9	Clay loam	CL	A-6	0-1	0-3	95-100	85-100	70-95	50-90	30-45	10-20
		9-29	Clay, silty clay loam	CH, CL	A-7	0-1	0-3	95-100	95-100	90-100	70-95	40-70	20-45
		29-80	Clay loam, loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Linveltdt-----	4	0-9	Fine sandy loam	SC-SM, SM	A-2-4, A-4	0	0-5	95-100	95-100	65-90	20-50	0-25	NP-10
		9-16	Sandy clay loam, loam, sandy loam	CL, CL-ML, SC, SC-SM	A-2-4, A-4	0-1	0-5	95-100	80-100	50-90	25-75	20-30	5-10
		16-29	Loamy sand, sand, coarse sand	SC-SM, SM, SP-SM	A-1, A-2, A-3	0-1	0-5	65-100	55-100	30-80	5-30	0-20	NP-3
		29-45	Loam, clay loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		45-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Hapludolls-----	1	0-9	Loam	CL, CL-ML	A-4, A-6	0	0-3	95-100	95-100	90-100	75-100	20-40	5-15
		9-60	Clay loam, silt loam, loam	CL-ML, SC, SC-SM, CL	A-4, A-6	0-1	0-5	95-100	80-100	55-100	35-90	20-40	5-20

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I45A:													
Northwood-----	75	0-9	Muck	PT	A-8	0	0	100	100	---	---	---	---
		9-14	Fine sandy loam, loamy fine sand, loamy sand	SC-SM, SM	A-2-4, A-4, A-2	0	0-3	95-100	90-100	50-85	15-50	0-25	NP-10
		14-24	Coarse sand, fine sand, loamy fine sand	SM, SP-SM	A-2, A-3, A-2-4	0	0-3	95-100	80-100	70-95	5-35	0-15	NP-3
		24-80	Loam, clay loam	CL-ML, CL	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Hamre-----	10	0-13	Muck	PT	A-8	0	0	100	100	---	---	---	---
		13-18	Loam, clay loam, silt loam	CL, CL-ML	A-4, A-6	0-1	0-3	90-100	80-100	70-100	50-90	25-40	5-20
		18-71	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		71-80	Loam, clay loam	CL-ML, CL	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Berner-----	5	0-28	Muck	PT	A-8	0	0	100	100	---	---	---	---
		28-31	Sandy loam, fine sandy loam, gravelly sandy loam	SC, SC-SM, SM	A-2-4, A-2, A-4	0	0	90-100	70-100	50-85	10-50	15-25	NP-10
		31-44	Sand, loamy sand, gravelly sand	SP, SP-SM, SM	A-2-4, A-2, A-3	0	0	90-100	70-100	60-80	0-25	0-20	NP-3
		44-80	Clay loam, loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Kratka-----	5	0-11	Fine sandy loam	SC-SM, SM	A-4	0	0	95-100	90-100	50-80	35-50	0-25	NP-10
		11-18	Loamy sand, sand, loamy fine sand	SW-SM, SP-SM, SM	A-2-4, A-3	0	0	95-100	90-100	50-80	5-35	0-20	NP-3
		18-25	Loamy sand, sand, fine sand	SM, SP-SM, SW-SM	A-2-4, A-2, A-3	0	0	95-100	90-100	50-80	5-35	0-20	NP-3
		25-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Strandquist----	3	0-10	Loam	CL-ML, CL	A-4	0	0	95-100	80-100	75-90	50-75	20-30	5-10
		10-20	Gravelly sand, gravelly coarse sand, very gravelly sand	GP, GP-GM, SP, SP-SM, GW-GM	A-1	0	2-5	30-65	15-45	5-40	0-10	0-20	NP-3
		20-60	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In			Pct	Pct					Pct		
I45A: Roliss-----	2	0-14	Loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	80-100	80-100	60-90	20-40	5-20
		14-20	Clay loam, loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		20-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
I46A: Pits-----	85	---	---	---	---	---	---	---	---	---	---	---	---
Udipsamments----	10	0-14	Sand	SW-SM, SC-SM, SP-SM, SM	A-2	0	0	95-100	85-100	75-90	10-35	0-20	NP-5
		14-60	Sand, fine sand	SW-SM, SM	A-2, A-3	0	0-5	95-100	85-100	50-75	5-25	0-20	NP-3
		60-80	Gravelly coarse sand, coarse sand	SW-SM, SP-SM, SP	A-1, A-2	0	0-5	70-95	55-85	25-60	0-10	0-20	NP-3
Radium-----	2	0-14	Loamy sand	SM, SW-SM	A-2-4	0	0	95-100	95-100	50-70	5-25	0-20	NP-5
		14-33	Sand, loamy sand, gravelly loamy coarse sand	SM, SP, SP-SM	A-1, A-2, A-3	0	0-5	75-100	65-95	35-60	3-15	0-20	NP-3
		33-43	Gravelly sand, gravelly coarse sand, very gravelly coarse sand	GW, GW-GM, SP, SP-SM	A-1	0	0-5	45-90	30-75	15-40	0-10	0-20	NP-3
		43-80	Sand, coarse sand, loamy sand	SM, SW-SM, SP-SM	A-1, A-2, A-3	0	0-5	85-100	75-95	40-75	5-20	0-20	NP-3
Maddock-----	1	0-10	Loamy fine sand	SC-SM, SM	A-2	0	0	100	95-100	50-80	15-35	0-20	NP-5
		10-14	Loamy sand, loamy fine sand, fine sand	SM, SP-SM	A-2, A-3	0	0	100	95-100	60-100	5-35	0-20	NP-3
		14-60	Loamy sand, loamy fine sand, fine sand	SM, SP-SM	A-3, A-2	0	0	100	95-100	60-100	5-35	0-20	NP-3

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I46A: Marquette-----	1	0-6	Loamy sand	SP-SM, SC-SM, SM	A-2	0	0-5	90-100	85-100	50-75	10-35	0-20	NP-5
		6-9	Fine sand, gravelly loamy fine sand, gravelly coarse sand	SM, SP-SM	A-2	0	0-5	90-100	85-100	50-75	10-35	0-20	NP-5
		9-14	Very gravelly fine sandy loam, very gravelly loam, very gravelly sandy loam	SM, GC, GM, SC	A-1, A-2	0	0-15	45-85	20-55	10-45	5-35	0-30	NP-10
		14-60	Stratified extremely gravelly coarse sand to fine sand	GP, SP-SM, SP, GP-GM	A-1, A-2, A-3	0	0-10	40-90	15-90	0-65	0-30	0-14	NP
Sandberg-----	1	0-12	Loamy sand	SM, SP-SM	A-1, A-2-4	0	0-5	85-100	50-95	40-75	10-25	0-20	NP-5
		12-19	Gravelly loamy coarse sand, gravelly coarse sand, loamy sand	SM, SP-SM	A-1, A-2, A-3	0	0-5	60-95	50-95	35-70	5-25	0-20	NP-3
		19-29	Gravelly coarse sand, coarse sand, sand	SP, SP-SM, SW-SM	A-1, A-2, A-3	0	0-5	50-95	40-95	30-65	0-10	0-20	NP-3
		29-80	Gravelly coarse sand, coarse sand, sand	SP, SP-SM, SW-SM	A-1, A-2, A-3	0	0-5	50-95	40-95	30-65	0-10	0-20	NP-3
I47A: Poppleton-----	75	0-6	Fine sand	SM, SC-SM	A-2-4	0	0	95-100	95-100	65-80	15-30	0-20	NP-5
		6-9	Fine sand, sand	SM	A-2-4, A-3	0	0	100	100	80-95	5-15	0-20	NP-3
		9-40	Fine sand, sand	SM	A-2-4, A-3	0	0	100	100	80-95	5-15	0-20	NP-3
		40-60	Fine sand, sand	SM	A-2-4, A-3	0	0	100	100	80-95	5-15	0-20	NP-3

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth In	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
I47A:						Pct	Pct					Pct	
Flaming-----	12	0-12	Loamy fine sand	SM, SC-SM	A-2-4	0	0	100	95-100	65-80	15-30	0-20	NP-5
		12-17	Fine sand, loamy sand, sand	SM, SW-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-30	0-20	NP-3
		17-27	Fine sand, loamy sand, sand	SM, SW-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-30	0-20	NP-3
		27-60	Fine sand, loamy sand, sand	SM, SW-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-30	0-20	NP-3
Garborg-----	5	0-12	Loamy fine sand	SC-SM, SM	A-2-4	0	0	100	95-100	50-80	15-35	0-20	NP-5
		12-41	Loamy fine sand, loamy sand, fine sand	SC-SM, SM, SP-SM	A-2-4	0	0	100	95-100	50-80	10-35	0-20	NP-3
		41-59	Fine sand, loamy sand, loamy fine sand	SC-SM, SM, SP-SM	A-3, A-2-4	0	0	100	95-100	50-80	5-35	0-20	NP-3
		59-80	Fine sand, loamy sand, loamy fine sand	SC-SM, SM, SP-SM	A-2-4	0	0	100	95-100	50-80	5-35	0-20	NP-3
Hamar-----	3	0-12	Loamy fine sand	SM, SC-SM	A-2-4	0	0	100	95-100	50-80	15-35	0-20	NP-5
		12-17	Loamy fine sand, loamy sand, fine sand	SC-SM, SM, SP-SM	A-2-4	0	0	100	95-100	50-80	10-35	0-20	NP-3
		17-40	Fine sand, loamy sand, loamy fine sand	SC-SM, SM, SP-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-35	0-20	NP-3
		40-47	Loamy fine sand	SC-SM, SM	A-2-4	0	0	100	95-100	50-80	15-35	0-20	NP-5
		47-60	Fine sand, loamy sand, loamy fine sand	SC-SM, SM, SP-SM	A-3, A-2-4	0	0	100	95-100	50-80	5-35	0-20	NP-3

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I47A: Radium-----	2	0-14	Loamy sand	SM, SW-SM	A-2-4	0	0	95-100	95-100	50-70	5-25	0-20	NP-5
		14-33	Sand, loamy sand, gravelly loamy coarse sand	SP, SP-SM, SM	A-1, A-2, A-3	0	0-5	75-100	65-95	35-60	3-15	0-20	NP-3
		33-43	Gravelly sand, gravelly coarse sand, very gravelly coarse sand	GW, GW-GM, SP, SP-SM	A-1	0	0-5	45-90	30-75	15-40	0-10	0-20	NP-3
		43-80	Sand, coarse sand, loamy sand	SM, SW-SM, SP-SM	A-1, A-2, A-3	0	0-5	85-100	75-95	40-75	5-20	0-20	NP-3
Ulen-----	2	0-9	Loamy fine sand	SM	A-2-4	0	0	100	95-100	50-80	15-30	0-20	NP-5
		9-42	Fine sandy loam, sandy loam, loamy fine sand	SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	15-25	NP-10
		42-60	Fine sand, sand	SM, SP-SM	A-1, A-2, A-3	0	0	85-100	75-95	45-75	5-25	0-20	NP-3
Maddock-----	1	0-10	Loamy fine sand	SC-SM, SM	A-2-4	0	0	100	95-100	50-80	15-35	0-20	NP-5
		10-14	Loamy sand, loamy fine sand, fine sand	SM, SP-SM	A-2-4, A-3	0	0	100	95-100	60-100	5-35	0-20	NP-3
		14-60	Loamy sand, loamy fine sand, fine sand	SM, SP-SM	A-2-4, A-3	0	0	100	95-100	60-100	5-35	0-20	NP-3

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I48A: Radium-----	75	0-14	Loamy sand	SM, SW-SM	A-2-4	0	0	95-100	95-100	50-70	5-25	0-20	NP-5
		14-33	Sand, loamy sand, gravelly loamy coarse sand	SM, SP, SP-SM	A-1, A-2, A-3	0	0-5	75-100	65-95	35-60	3-15	0-20	NP-3
		33-43	Gravelly sand, gravelly coarse sand, very gravelly coarse sand	GW, GW-GM, SP, SP-SM	A-1	0	0-5	45-90	30-75	15-40	0-10	0-20	NP-3
		43-80	Sand, coarse sand, loamy sand	SM, SW-SM, SP-SM	A-1, A-2, A-3	0	0-5	85-100	75-95	40-75	5-20	0-20	NP-3
Sandberg-----	7	0-12	Loamy sand	SM, SP-SM	A-1, A-2	0	0-5	85-100	50-95	40-75	10-25	0-20	NP-5
		12-19	Gravelly loamy coarse sand, gravelly coarse sand, loamy sand	SM, SP-SM	A-1, A-2, A-3	0	0-5	60-95	50-95	35-70	5-25	0-20	NP-3
		19-29	Gravelly coarse sand, coarse sand, sand	SP, SP-SM, SW-SM	A-1, A-2, A-3	0	0-5	50-95	40-95	30-65	0-10	0-20	NP-3
		29-80	Gravelly coarse sand, coarse sand, sand	SP, SP-SM, SW-SM	A-1, A-2, A-3	0	0-5	50-95	40-95	30-65	0-10	0-20	NP-3
Oylen-----	5	0-10	Sandy loam	SC-SM, SM	A-2-4, A-4	0	0	100	85-100	60-85	25-45	0-20	NP-5
		10-18	Loam, sandy loam	SC-SM, SC, CL-ML, CL	A-4	0	0	100	85-100	60-85	35-60	20-30	5-10
		18-38	Loamy sand, sand, coarse sand	SM, SP-SM	A-2-4, A-3	0	0	90-100	70-100	35-65	5-20	0-20	NP-3
		38-80	Sand, coarse sand, gravelly coarse sand	SP-SM, SP	A-1-b, A-2-4, A-3	0	0	90-100	60-100	35-55	3-10	0-20	NP-3

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth In	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
I48A:													
Flaming-----	4	0-12	Loamy fine sand	SM, SC-SM	A-2-4	0	0	100	95-100	65-80	15-30	0-20	NP-5
		12-17	Fine sand, loamy sand, sand	SM, SW-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-30	0-20	NP-3
		17-27	Fine sand, loamy sand, sand	SM, SW-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-30	0-20	NP-3
		27-60	Fine sand, loamy sand, sand	SM, SW-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-30	0-20	NP-3
Garborg-----	3	0-12	Loamy fine sand	SC-SM, SM	A-2-4	0	0	100	95-100	50-80	15-35	0-20	NP-5
		12-41	Loamy fine sand, loamy sand, fine sand	SC-SM, SM, SP-SM	A-2-4	0	0	100	95-100	50-80	10-35	0-20	NP-3
		41-59	Fine sand, loamy sand, loamy fine sand	SC-SM, SM, SP-SM	A-3, A-2-4	0	0	100	95-100	50-80	5-35	0-20	NP-3
		59-80	Fine sand, loamy sand, loamy fine sand	SC-SM, SM, SP-SM	A-2-4	0	0	100	95-100	50-80	5-35	0-20	NP-3
Hangaard-----	3	0-10	Sandy loam	SM	A-2-4, A-4	0	0-3	95-100	80-100	50-75	15-45	0-25	NP-10
		10-15	Loamy sand, coarse sandy loam, loamy coarse sand	SM, SP-SM	A-1, A-2-4, A-3	0	0-3	95-100	80-95	40-70	5-25	0-20	NP-5
		15-80	Gravelly coarse sand, gravelly sand, coarse sand	SP, SP-SM	A-1, A-2, A-3	0	0-3	70-95	55-90	30-60	0-10	0-20	NP-3

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I48A:													
Hamar-----	2	0-12	Loamy fine sand	SM, SC-SM	A-2-4	0	0	100	95-100	50-80	15-35	0-20	NP-5
		12-17	Loamy fine sand, loamy sand, fine sand	SC-SM, SM, SP-SM	A-2-4	0	0	100	95-100	50-80	10-35	0-20	NP-3
		17-40	Fine sand, loamy sand, loamy fine sand	SC-SM, SM, SP-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-35	0-20	NP-3
		40-47	Loamy fine sand	SC-SM, SM	A-2-4	0	0	100	95-100	50-80	15-35	0-20	NP-5
		47-60	Fine sand, loamy sand, loamy fine sand	SC-SM, SM, SP-SM	A-3, A-2-4	0	0	100	95-100	50-80	5-35	0-20	NP-3
Poppleton-----	1	0-6	Fine sand	SM, SC-SM	A-2-4	0	0	95-100	95-100	65-80	15-30	0-20	NP-5
		6-9	Fine sand, sand	SM	A-2-4, A-3	0	0	100	100	80-95	5-15	0-20	NP-3
		9-40	Fine sand, sand	SM	A-2-4, A-3	0	0	100	100	80-95	5-15	0-20	NP-3
		40-60	Fine sand, sand	SM	A-2-4, A-3	0	0	100	100	80-95	5-15	0-20	NP-3
I49A:													
Rauville-----	80	0-27	Silty clay loam	CL	A-6	0	0	100	100	90-100	85-100	25-40	10-20
		27-45	Silty clay loam, silt loam	CL	A-6	0	0	100	100	90-100	85-100	25-40	10-20
		45-60	Stratified gravelly loamy sand to clay loam	CL, ML, SM	A-1, A-3, A-4, A-6	0	0	95-100	70-100	35-95	5-80	0-40	NP-15
Fluvaquents-----	12	0-16	Fine sandy loam	SC-SM, SM, ML, CL-ML	A-4	0	0	95-100	90-100	70-85	40-55	0-25	NP-10
		16-80	Stratified loamy sand to silt loam	CL, ML, SM	A-1, A-3, A-4, A-6	0	0	95-100	70-100	35-95	5-80	0-40	NP-15
Water-----	5	---	---	---	---	---	---	---	---	---	---	---	---

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In			Pct	Pct					Pct		
<b>I49A:</b>													
Lamoure-----	3	0-27	Silty clay loam	CL	A-6	0	0	100	100	95-100	85-100	25-40	10-20
		27-43	Silty clay loam, silt loam	CL	A-6	0	0	100	100	90-100	60-100	25-40	10-20
		43-52	Silty clay loam, silt loam, loam	CL	A-6	0	0	95-100	95-100	90-100	60-100	25-40	10-20
		52-60	Stratified loamy sand to silt loam	CL, ML, SM	A-1, A-3, A-4, A-6	0	0	95-100	70-100	35-95	5-80	0-40	NP-15
<b>I50A:</b>													
Reiner-----	70	0-7	Fine sandy loam	SC-SM, SM	A-4	0	0-5	85-100	85-95	65-85	35-50	15-35	NP-10
		7-17	Clay loam, loam, sandy clay loam	CL	A-6	0	0-3	85-100	75-100	60-95	55-80	25-40	10-20
		17-35	Clay loam, loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		35-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Smiley-----	12	0-12	Loam	CL, CL-ML, ML	A-4, A-6	0-1	0-2	95-100	85-100	70-95	50-80	15-35	2-12
		12-19	Clay loam, loam, silty clay loam	CL	A-6	0-1	0-3	95-100	85-100	70-95	50-80	25-40	10-20
		19-42	Clay loam, loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		42-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Reiner, very cobbly-----	7	0-7	Fine sandy loam	SC-SM, SM	A-4	1-3	1-10	85-100	85-95	65-85	35-50	15-35	NP-10
		7-17	Clay loam, loam, sandy clay loam	CL	A-6	0	0-3	85-100	75-100	60-95	55-80	25-40	10-20
		17-35	Clay loam, loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		35-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Linveltdt-----	5	0-9	Fine sandy loam	SC-SM, SM	A-2-4, A-4	0	0-5	95-100	95-100	65-90	20-50	0-25	NP-10
		9-16	Sandy clay loam, loam, sandy loam	CL, CL-ML, SC, SC-SM	A-2-4, A-4	0-1	0-5	95-100	80-100	50-90	25-75	20-30	5-10
		16-29	Loamy sand, sand, coarse sand	SC-SM, SM, SP-SM	A-1, A-2, A-3	0-1	0-5	65-100	55-100	30-80	5-30	0-20	NP-3
		29-45	Clay loam, loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		45-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I50A:													
Eckvoll-----	3	0-9	Loamy fine sand	SC-SM, SM	A-2	0-1	0-2	90-100	85-100	65-80	15-30	0-20	NP-5
		9-25	Fine sand, sand, loamy fine sand	SP-SM, SM	A-1, A-2, A-3	0	0-2	95-100	95-100	45-75	5-30	0-20	NP-3
		25-32	Clay loam, sandy clay loam, loam	CL, SC	A-6	0	0-5	90-100	75-100	60-95	45-75	25-40	10-20
		32-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Kratka-----	3	0-11	Fine sandy loam	SC-SM, SM	A-4	0	0	95-100	90-100	50-80	35-50	0-25	NP-10
		11-18	Loamy sand, sand, loamy fine sand	SW-SM, SP-SM, SM	A-2-4, A-3	0	0	95-100	90-100	50-80	5-35	0-20	NP-3
		18-25	Loamy sand, sand, fine sand	SM, SP-SM, SW-SM	A-2-4, A-2, A-3	0	0	95-100	90-100	50-80	5-35	0-20	NP-3
		25-80	Clay loam, loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
I51A:													
Reiner-----	65	0-7	Loamy fine sand	SM	A-2	0	0-5	90-100	85-95	60-80	15-30	0-20	NP-5
		7-17	Clay loam, loam, sandy clay loam	CL	A-6	0	0-3	85-100	75-100	60-95	55-80	25-40	10-20
		17-35	Clay loam, loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		35-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Smiley-----	9	0-12	Loam	CL, CL-ML, ML	A-4, A-6	0-1	0-2	95-100	85-100	70-95	50-80	15-35	2-12
		12-19	Clay loam, loam, silty clay loam	CL	A-6	0-1	0-3	95-100	85-100	70-95	50-80	25-40	10-20
		19-42	Loam, clay loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		42-80	Clay loam, loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Reiner fine sandy loam----	8	0-7	Fine sandy loam	SC-SM, SM	A-4	0	0-5	85-100	85-95	65-85	35-50	15-35	NP-10
		7-17	Clay loam, loam, sandy clay loam	CL	A-6	0	0-3	85-100	75-100	60-95	55-80	25-40	10-20
		17-35	Clay loam, loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		35-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
					Pct	Pct					Pct		
I51A:		In											
Linveltdt-----	7	0-9	Fine sandy loam	SC-SM, SM	A-2-4, A-4	0	0-5	95-100	95-100	65-90	20-50	0-25	NP-10
		9-16	Sandy clay loam, loam, sandy loam	CL, CL-ML, SC, SC-SM	A-2-4, A-4	0-1	0-5	95-100	80-100	50-90	25-75	20-30	5-10
		16-29	Loamy sand, sand, coarse sand	SC-SM, SM, SP-SM	A-1, A-2, A-3	0-1	0-5	65-100	55-100	30-80	5-30	0-20	NP-3
		29-45	Clay loam, loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		45-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Kratka-----	5	0-11	Fine sandy loam	SC-SM, SM	A-4	0	0	95-100	90-100	50-80	35-50	0-25	NP-10
		11-18	Loamy sand, sand, loamy fine sand	SW-SM, SP-SM, SM	A-2-4, A-3	0	0	95-100	90-100	50-80	5-35	0-20	NP-3
		18-25	Loamy sand, sand, fine sand	SM, SP-SM, SW-SM	A-2-4, A-2, A-3	0	0	95-100	90-100	50-80	5-35	0-20	NP-3
		25-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Eckvoll-----	3	0-9	Loamy fine sand	SC-SM, SM	A-2	0-1	0-2	90-100	85-100	65-80	15-30	0-20	NP-5
		9-25	Fine sand, sand, loamy fine sand	SP-SM, SM	A-1, A-2, A-3	0	0-2	95-100	95-100	45-75	5-30	0-20	NP-3
		25-32	Clay loam, sandy clay loam, loam	CL, SC	A-6	0	0-5	90-100	75-100	60-95	45-75	25-40	10-20
		32-80	Clay loam, loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Reiner, very cobbly-----	3	0-7	Fine sandy loam	SC-SM, SM	A-4	1-3	1-10	85-100	85-95	65-85	35-50	15-35	NP-10
		7-17	Clay loam, loam, sandy clay loam	CL	A-6	0	0-3	85-100	75-100	60-95	55-80	25-40	10-20
		17-35	Loam, clay loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		35-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I52A:													
Reis-----	55	0-9	Clay	CH, CL	A-7	0-1	0-1	95-100	95-100	90-100	70-95	45-70	20-50
		9-17	Clay, silty clay	CH, CL	A-7	0-1	0-3	95-100	95-100	90-100	70-95	45-75	20-50
		17-33	Clay, silty clay	CH, CL	A-7	0-1	0-3	95-100	95-100	90-100	70-95	45-75	20-50
		33-42	Clay, silty clay	CH, CL	A-7	0-1	0-3	95-100	95-100	90-100	70-95	45-75	20-50
		42-60	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
		60-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Clearwater-----	30	0-8	Clay	CH, CL	A-7	0-1	0-1	95-100	95-100	90-100	70-95	45-70	20-50
		8-35	Clay, silty clay loam	CH, CL	A-7	0-1	0-3	95-100	95-100	90-100	70-95	40-70	20-45
		35-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Clearwater, very cobbly-----	5	0-8	Clay	CH, CL	A-7	1-3	1-10	95-100	95-100	90-100	70-95	45-70	20-50
		8-35	Clay, silty clay, silty clay loam	CH, CL	A-7	0-1	0-3	95-100	95-100	90-100	70-95	40-70	20-45
		35-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Clearwater, depressional---	3	0-8	Mucky clay loam	CL	A-6	0	0-3	95-100	95-100	80-95	60-85	25-40	10-20
		8-35	Clay, silty clay, silty clay loam	CH, CL	A-7	0-1	0-1	95-100	95-100	90-100	70-95	40-70	20-45
		35-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I52A: Espelie-----	3	0-9	Fine sandy loam	CL, ML, SC, SM	A-2-4, A-4	0	0	95-100	85-100	60-85	30-65	0-25	NP-10
		9-24	Loamy sand, loamy fine sand, fine sand	SM, SP-SM	A-2, A-3, A-1, A-2-4	0	0-5	85-100	60-100	30-80	5-40	0-20	NP-3
		24-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Hattie-----	3	0-8	Clay	CH, CL	A-7	0-1	0-1	95-100	95-100	90-100	70-95	45-70	20-50
		8-22	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
		22-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Wyandotte-----	1	0-8	Clay loam	CL	A-6	0-1	0-3	95-100	85-100	70-95	50-70	30-40	10-15
		8-15	Loam, sandy clay loam	CL, CL-ML	A-4	0	0-3	95-100	80-95	60-90	50-65	20-35	5-10
		15-34	Gravelly loamy coarse sand, gravelly sand, very gravelly loamy coarse sand	GP-GM, GP, SP-SM, SP	A-1	0	2-5	20-65	15-45	5-40	0-10	0-20	NP-3
		34-60	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
I53A: Roliss-----	75	0-14	Loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	80-100	80-100	60-90	20-40	5-20
		14-20	Loam, clay loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		20-80	Clay loam, loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Kratka-----	8	0-11	Fine sandy loam	SC-SM, SM	A-4	0	0	95-100	90-100	50-80	35-50	0-25	NP-10
		11-18	Loamy sand, sand, loamy fine sand	SW-SM, SP-SM, SM	A-2-4, A-3	0	0	95-100	90-100	50-80	5-35	0-20	NP-3
		18-25	Loamy sand, sand, fine sand	SM, SP-SM, SW-SM	A-2-4, A-2, A-3	0	0	95-100	90-100	50-80	5-35	0-20	NP-3
		25-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I53A: Roliss, very cobbly-----	7	0-14	Loam	CL, CL-ML	A-4, A-6	1-3	1-10	95-100	80-100	80-100	60-90	20-40	5-20
		14-20	Loam, clay loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		20-80	Clay loam, loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Kittson-----	5	0-10	Loam	CL, CL-ML	A-4, A-6	0	0	100	95-100	85-95	50-75	20-35	5-15
		10-17	Loam, fine sandy loam, sandy loam	CL, SC	A-4	0	0-5	90-100	65-100	55-90	35-75	20-35	5-10
		17-36	Clay loam, loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		36-60	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Roliss, depressional---	3	0-14	Loam	CL, CL-ML	A-4, A-6	0-1	0-1	95-100	85-95	80-95	60-85	20-40	5-20
		14-20	Clay loam, loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		20-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Smiley-----	2	0-12	Loam	CL, CL-ML, ML	A-4, A-6	0-1	0-2	95-100	85-100	70-95	50-80	15-35	2-12
		12-19	Clay loam, loam, silty clay loam	CL	A-6	0-1	0-3	95-100	85-100	70-95	50-80	25-40	10-20
		19-42	Loam, clay loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		42-80	Clay loam, loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
I54A: Roliss, depressional---	80	0-14	Loam	CL, CL-ML	A-4, A-6	0-1	0-1	95-100	85-95	80-95	60-85	20-40	5-20
		14-20	Clay loam, loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		20-80	Clay loam, loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Roliss-----	12	0-14	Loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	80-100	80-100	60-90	20-40	5-20
		14-20	Clay loam, loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		20-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Hamre-----	5	0-13	Muck	PT	A-8	0	0	100	100	---	---	---	---
		13-18	Loam, clay loam, silt loam	CL, CL-ML	A-4, A-6	0-1	0-3	90-100	80-100	70-100	50-90	25-40	5-20
		18-71	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		71-80	Loam, clay loam	CL-ML, CL	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I54A: Kratka-----	3	0-11	Fine sandy loam	SC-SM, SM	A-4	0	0	95-100	90-100	50-80	35-50	0-25	NP-10
		11-18	Loamy sand, sand, loamy fine sand	SW-SM, SP-SM, SM	A-2-4, A-3	0	0	95-100	90-100	50-80	5-35	0-20	NP-3
		18-25	Loamy sand, sand, fine sand	SM, SP-SM, SW-SM	A-2, A-2-4, A-3	0	0	95-100	90-100	50-80	5-35	0-20	NP-3
		25-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
I55A: Rosewood-----	75	0-8	Fine sandy loam	SC, SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-90	30-50	0-25	NP-10
		8-18	Fine sandy loam, sandy loam, loamy fine sand	SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	20-30	NP-10
		18-80	Fine sand, sand	SM, SP-SM	A-1, A-2-4, A-3	0	0	85-100	75-100	45-75	5-35	0-20	NP-3
Ulen-----	10	0-9	Fine sandy loam	SC, SC-SM, SM	A-4	0	0	100	100	80-100	35-50	0-25	NP-10
		9-42	Fine sandy loam, sandy loam, loamy fine sand	SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	15-25	NP-10
		42-60	Fine sand, sand	SM, SP-SM	A-1, A-2, A-3	0	0	85-100	75-95	45-75	5-25	0-20	NP-3
Hamar-----	6	0-12	Loamy fine sand	SM, SC-SM	A-2-4	0	0	100	95-100	50-80	15-35	0-20	NP-5
		12-17	Loamy fine sand, loamy sand, fine sand	SC-SM, SM, SP-SM	A-2-4	0	0	100	95-100	50-80	10-35	0-20	NP-3
		17-40	Fine sand, loamy sand, loamy fine sand	SC-SM, SM, SP-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-35	0-20	NP-3
		40-47	Loamy fine sand	SC-SM, SM	A-2-4	0	0	100	95-100	50-80	15-35	0-20	NP-5
		47-60	Fine sand, loamy sand, loamy fine sand	SC-SM, SM, SP-SM	A-3, A-2-4	0	0	100	95-100	50-80	5-35	0-20	NP-3

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I55A: Rosewood, depressional---	3	0-8	Fine sandy loam	SC, SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	70-85	30-50	0-25	NP-10
		8-18	Fine sandy loam, sandy loam, loamy fine sand	SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	20-30	NP-10
		18-80	Fine sand, sand	SM, SP-SM	A-1, A-2-4, A-3	0	0	85-100	75-100	45-75	5-35	0-20	NP-3
Syrene-----	3	0-9	Sandy loam	SC-SM, SM	A-4	0-1	0-3	95-100	80-100	60-75	20-45	0-25	NP-10
		9-17	Loam, sandy loam, sandy clay loam	CL-ML, SC-SM, CL, SC	A-4	0	0-5	95-100	85-100	50-75	15-65	20-35	5-15
		17-27	Stratified loamy fine sand to gravelly coarse sand	SP, SP-SM	A-1, A-2, A-3	0-1	0-5	70-95	55-80	30-60	0-10	0-20	NP-3
		27-60	Stratified loamy fine sand to gravelly coarse sand	SP, SP-SM	A-1, A-2, A-3	0-1	0-5	70-95	55-80	30-60	0-10	0-20	NP-3
Karlsruhe-----	1	0-15	Sandy loam	SM, SC, SC-SM	A-4, A-2	0	0-3	95-100	85-100	55-90	15-50	0-25	NP-10
		15-30	Sandy loam, loamy sand	SM, SC, SC-SM	A-2, A-4, A-1	0	0-3	95-100	85-100	45-75	10-40	0-25	NP-10
		30-60	Coarse sand, gravelly coarse sand, gravelly sand	GP-GM, SP, SM, GP, SP-SM	A-1, A-2, A-3	0	0-5	45-90	30-80	20-70	0-15	0-20	NP-1
Strathcona-----	1	0-10	Fine sandy loam	CL-ML, ML, SM, SC-SM	A-4	0	0	95-100	90-100	70-85	40-55	0-25	NP-10
		10-17	Fine sandy loam, sandy loam, loamy fine sand	SM, SC-SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	20-30	NP-10
		17-28	Sand, fine sand, loamy fine sand	SM, SP-SM	A-2-4, A-3, A-2	0	0-1	95-100	90-100	50-80	5-30	0-20	NP-3
		28-80	Clay loam, loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I55A: Thiefriver-----	1	0-12	Fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0	0	95-100	80-100	70-90	35-55	0-25	NP-10
		12-23	Fine sandy loam, sandy loam, loamy fine sand	SM, SC-SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	20-30	NP-10
		23-32	Fine sand, loamy fine sand, loamy sand	SM, SP-SM	A-2-4, A-2, A-3	0	0-3	90-100	80-100	50-80	5-35	0-20	NP-3
		32-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
I56A: Rosewood-----	50	0-8	Fine sandy loam	SC, SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-90	30-50	0-25	NP-10
		8-18	Fine sandy loam, sandy loam, loamy fine sand	SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	20-30	NP-10
		18-80	Fine sand, sand	SM, SP-SM	A-1, A-2-4, A-3	0	0	85-100	75-100	45-75	5-35	0-20	NP-3
Venlo-----	40	0-13	Fine sandy loam	SC-SM, SM	A-2-4, A-4	0	0	100	95-100	50-85	30-50	0-25	NP-5
		13-60	Fine sand, loamy sand, loamy fine sand	SC-SM, SM, SP-SM	A-3, A-2-4	0	0	100	95-100	50-80	5-35	0-20	NP-3
Deerwood-----	3	0-10	Muck	PT	A-8	0	0	100	100	---	---	---	---
		10-12	Fine sand, loamy sand, fine sandy loam	SM, SC-SM	A-2, A-4	0	0-2	95-100	90-100	50-75	15-50	0-25	NP-10
		12-60	Fine sand, sand, gravelly sand	SM, SP, SP-SM	A-1, A-2, A-3	0	0-5	75-100	55-100	35-70	0-25	0-20	NP-3

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I56A: Syrene-----	3	0-9	Sandy loam	SC-SM, SM	A-4	0-1	0-3	95-100	80-100	60-75	20-45	0-25	NP-10
		9-17	Loam, sandy loam, sandy clay loam	CL-ML, SC-SM, CL, SC	A-4	0	0-5	95-100	85-100	50-75	15-65	20-35	5-15
		17-27	Stratified loamy fine sand to gravelly coarse sand	SP, SP-SM	A-1, A-2, A-3	0-1	0-5	70-95	55-80	30-60	0-10	0-20	NP-3
		27-60	Stratified loamy fine sand to gravelly coarse sand	SP, SP-SM	A-1, A-2, A-3	0-1	0-5	70-95	55-80	30-60	0-10	0-20	NP-3
Ulen-----	2	0-9	Loamy fine sand	SM	A-2-4	0	0	100	95-100	50-80	15-30	0-20	NP-5
		9-42	Fine sandy loam, sandy loam, loamy fine sand	SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	15-25	NP-10
		42-60	Fine sand, sand	SM, SP-SM	A-1, A-2-4, A-3	0	0	85-100	75-95	45-75	5-25	0-20	NP-3
Strathcona-----	1	0-10	Fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0	0	95-100	90-100	70-85	40-55	0-25	NP-10
		10-17	Fine sandy loam, sandy loam, loamy fine sand	SM, SC-SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	20-30	NP-10
		17-28	Sand, fine sand, loamy fine sand	SM, SP-SM	A-2-4, A-3, A-2	0	0-1	95-100	90-100	50-80	5-30	0-20	NP-3
		28-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I56A: Thiefriever-----	1	0-12	Fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0	0	95-100	80-100	70-90	35-55	0-25	NP-10
		12-23	Fine sandy loam, sandy loam, loamy fine sand	SM, SC-SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	20-30	NP-10
		23-32	Fine sand, loamy fine sand, loamy sand	SM, SP-SM	A-2-4, A-2, A-3	0	0-3	90-100	80-100	50-80	5-35	0-20	NP-3
		32-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
I57B: Sandberg-----	50	0-12	Loamy sand	SM, SP-SM	A-1, A-2-4	0	0-5	85-100	50-95	40-75	10-25	0-20	NP-5
		12-19	Gravelly loamy coarse sand, gravelly coarse sand, loamy sand	SM, SP-SM	A-1, A-2, A-3	0	0-5	60-95	50-95	35-70	5-25	0-20	NP-3
		19-29	Gravelly coarse sand, coarse sand, sand	SP, SP-SM, SW-SM	A-1, A-2, A-3	0	0-5	50-95	40-95	30-65	0-10	0-20	NP-3
		29-80	Gravelly coarse sand, coarse sand, sand	SP, SP-SM, SW-SM	A-1, A-2, A-3	0	0-5	50-95	40-95	30-65	0-10	0-20	NP-3
Radium-----	25	0-14	Loamy sand	SM, SW-SM	A-2-4	0	0	95-100	95-100	50-70	5-25	0-20	NP-5
		14-33	Sand, loamy sand, gravelly loamy coarse sand	SP, SM, SP-SM	A-1, A-2, A-3	0	0-5	75-100	65-95	35-60	3-15	0-20	NP-3
		33-43	Gravelly sand, gravelly coarse sand, very gravelly coarse sand	GW, GW-GM, SP, SP-SM	A-1	0	0-5	45-90	30-75	15-40	0-10	0-20	NP-3
		43-80	Sand, coarse sand, loamy sand	SM, SW-SM, SP-SM	A-1, A-2, A-3	0	0-5	85-100	75-95	40-75	5-20	0-20	NP-3

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I57B:													
Sioux-----	8	0-5	Sandy loam	SM	A-4	0	0-5	95-100	80-100	60-85	35-45	0-25	NP-10
		5-8	Gravelly loam, gravelly sandy loam, gravelly loamy sand	GM, SM	A-1, A-2, A-4	0	0-5	60-90	50-80	45-70	15-50	0-25	NP-5
		8-60	Extremely gravelly sand, very gravelly loamy sand, very gravelly sand	GM, GP, SM, SP, SP-SM, GP-GM	A-1, A-2	0	0-5	25-75	20-60	5-35	0-25	0-25	NP-5
Oylen-----	7	0-10	Sandy loam	SC-SM, SM	A-2-4, A-4	0	0	100	85-100	60-85	25-45	0-20	NP-5
		10-18	Loam, sandy loam	SC-SM, SC, CL-ML, CL	A-4	0	0	100	85-100	60-85	35-60	20-30	5-10
		18-38	Coarse sand, loamy sand, sand	SM, SP-SM	A-2-4, A-3	0	0	90-100	70-100	35-65	5-20	0-20	NP-3
		38-80	Gravelly coarse sand, sand, coarse sand	SP-SM, SP	A-1-b, A-2-4, A-3	0	0	90-100	60-100	35-55	3-10	0-20	NP-3
Flaming-----	5	0-12	Loamy fine sand	SM, SC-SM	A-2-4	0	0	100	95-100	65-80	15-30	0-20	NP-5
		12-17	Fine sand, loamy sand, sand	SM, SW-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-30	0-20	NP-3
		17-27	Fine sand, loamy sand, sand	SM, SW-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-30	0-20	NP-3
		27-60	Fine sand, loamy sand, sand	SM, SW-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-30	0-20	NP-3

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
<b>I57B:</b>													
Garborg-----	5	0-12	Loamy fine sand	SC-SM, SM	A-2-4	0	0	100	95-100	50-80	15-35	0-20	NP-5
		12-41	Loamy fine sand, loamy sand, fine sand	SC-SM, SM, SP-SM	A-2-4	0	0	100	95-100	50-80	10-35	0-20	NP-3
		41-59	Fine sand, loamy sand, loamy fine sand	SC-SM, SM, SP-SM	A-3, A-2-4	0	0	100	95-100	50-80	5-35	0-20	NP-3
		59-80	Fine sand, loamy sand, loamy fine sand	SC-SM, SM, SP-SM	A-2-4	0	0	100	95-100	50-80	5-35	0-20	NP-3
<b>I58A:</b>													
Seelyeville-----	90	0-10	Muck	PT	A-8	0	0	100	100	---	---	---	---
		10-80	Muck, mucky peat	PT	A-8	0	0	100	100	---	---	---	---
Cathro-----	3	0-11	Muck	PT	A-8	0	0	100	100	---	---	---	---
		11-23	Muck	PT	A-8	0	0	100	100	---	---	---	---
		23-60	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Dora-----	3	0-12	Mucky peat	PT	A-8	0	0	100	100	---	---	---	---
		12-32	Muck	PT	A-8	0	0	100	100	---	---	---	---
		32-36	Mucky silty clay loam, mucky silt loam	CL	A-6	0	0	100	100	90-100	85-95	25-40	10-20
		36-60	Silty clay loam, silty clay, clay	CH, CL	A-7	0	0	100	100	90-100	90-100	45-80	35-50
Markey-----	3	0-32	Muck	PT	A-8	0	0	100	100	---	---	---	---
		32-60	Fine sand, loamy sand, coarse sand	SM, SP, SP-SM	A-2, A-3, A-2-4	0	0	100	75-100	60-75	0-20	0-20	NP-3

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I58A: Berner-----	1	0-28	Muck	PT	A-8	0	0	100	100	---	---	---	---
		28-31	Sandy loam, fine sandy loam, gravelly sandy loam	SC, SC-SM, SM	A-2-4, A-2, A-4	0	0	90-100	70-100	50-85	10-50	15-25	NP-10
		31-44	Sand, loamy sand, gravelly sand	SP, SP-SM, SM	A-2-4, A-2, A-3	0	0	90-100	70-100	60-80	0-25	0-20	NP-3
		44-80	Clay loam, loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
I59A: Smiley-----	65	0-12	Loam	CL, CL-ML, ML	A-4, A-6	0-1	0-2	95-100	85-100	70-95	50-80	15-35	2-12
		12-19	Clay loam, loam, silty clay loam	CL	A-6	0-1	0-3	95-100	85-100	70-95	50-80	25-40	10-20
		19-42	Clay loam, loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		42-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Smiley, very cobbly-----	10	0-12	Loam	CL, CL-ML, ML	A-4, A-6	1-3	1-10	95-100	85-100	70-95	50-80	15-35	2-12
		12-19	Clay loam, loam, silty clay loam	CL	A-6	0-1	0-3	95-100	85-100	70-95	50-80	25-40	10-20
		19-42	Clay loam, loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		42-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Kratka-----	9	0-11	Fine sandy loam	SC-SM, SM	A-4	0	0	95-100	90-100	50-80	35-50	0-25	NP-10
		11-18	Loamy sand, sand, loamy fine sand	SW-SM, SP-SM, SM	A-2-4, A-3	0	0	95-100	90-100	50-80	5-35	0-20	NP-3
		18-25	Loamy sand, sand, fine sand	SM, SP-SM, SW-SM	A-2-4, A-2, A-3	0	0	95-100	90-100	50-80	5-35	0-20	NP-3
		25-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Roliss-----	5	0-14	Loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	80-100	80-100	60-90	20-40	5-20
		14-20	Clay loam, loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		20-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Reiner-----	4	0-7	Fine sandy loam	SC-SM, SM	A-4	0	0-5	85-100	85-95	65-85	35-50	15-35	NP-10
		7-17	Clay loam, loam, sandy clay loam	CL	A-6	0	0-3	85-100	75-100	60-95	55-80	25-40	10-20
		17-35	Clay loam, loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		35-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I59A:													
Linveldt-----	3	0-9	Fine sandy loam	SC-SM, SM	A-2-4, A-4	0	0-5	95-100	95-100	65-90	20-50	0-25	NP-10
		9-16	Sandy clay loam, loam, sandy loam	CL, CL-ML, SC, SC-SM	A-2-4, A-4	0-1	0-5	95-100	80-100	50-90	25-75	20-30	5-10
		16-29	Loamy sand, sand, coarse sand	SC-SM, SM, SP-SM	A-1, A-2, A-3	0-1	0-5	65-100	55-100	30-80	5-30	0-20	NP-3
		29-45	Clay loam, loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		45-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Smiley, depressional---	3	0-12	Mucky loam	CL, CL-ML	A-4, A-6	0-1	0-3	95-100	85-95	80-95	60-85	20-40	5-20
		12-19	Clay loam, loam, silty clay loam	CL	A-6	0-1	0-3	95-100	85-100	70-95	50-80	25-40	10-20
		19-42	Clay loam, loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		42-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Strandquist-----	1	0-10	Loam	CL-ML, CL	A-4	0	0	95-100	80-100	75-90	50-75	20-30	5-10
		10-20	Gravelly sand, gravelly coarse sand, very gravelly sand	GP, GP-GM, SP, SP-SM, GW-GM	A-1	0	2-5	30-65	15-45	5-40	0-10	0-20	NP-3
		20-60	Clay loam, loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
I60A: Smiley, depressional---	80	0-12	Mucky loam	CL, CL-ML	A-4, A-6	0-1	0-3	95-100	85-95	80-95	60-85	20-40	5-20
		12-19	Clay loam, loam, silty clay loam	CL	A-6	0-1	0-3	95-100	85-100	70-95	50-80	25-40	10-20
		19-42	Clay loam, loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		42-80	Clay loam, loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Smiley-----	10	0-12	Loam	CL, CL-ML, ML	A-4, A-6	0-1	0-2	95-100	85-100	70-95	50-80	15-35	2-12
		12-19	Clay loam, loam, silty clay loam	CL	A-6	0-1	0-3	95-100	85-100	70-95	50-80	25-40	10-20
		19-42	Loam, clay loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		42-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I60A: Hamre-----	5	0-13	Muck	PT	A-8	0	0	100	100	---	---	---	---
		13-18	Loam, clay loam, silt loam	CL, CL-ML	A-4, A-6	0-1	0-3	90-100	80-100	70-100	50-90	25-40	5-20
		18-71	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		71-80	Clay loam, loam	CL-ML, CL	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Kratka-----	5	0-11	Fine sandy loam	SC-SM, SM	A-4	0	0	95-100	90-100	50-80	35-50	0-25	NP-10
		11-18	Loamy sand, sand, loamy fine sand	SW-SM, SP-SM, SM	A-2-4, A-3	0	0	95-100	90-100	50-80	5-35	0-20	NP-3
		18-25	Loamy sand, sand, fine sand	SM, SP-SM, SW-SM	A-2-4, A-2, A-3	0	0	95-100	90-100	50-80	5-35	0-20	NP-3
		25-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
I61A: Strandquist----	70	0-10	Loam	CL-ML, CL	A-4	0	0	95-100	80-100	75-90	50-75	20-30	5-10
		10-20	Gravelly sand, gravelly coarse sand, very gravelly sand	GP, GP-GM, SP, SP-SM, GW-GM	A-1	0	2-5	30-65	15-45	5-40	0-10	0-20	NP-3
		20-60	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Mavie-----	8	0-12	Fine sandy loam	SC-SM, SM	A-4	0	0-3	95-100	90-100	50-80	35-50	0-25	NP-10
		12-18	Loam, fine sandy loam, sandy loam	SM, CL-ML, SC, SC-SM	A-4, A-6	0	0-5	95-100	85-100	65-95	15-75	20-35	NP-15
		18-39	Very gravelly coarse sand, very gravelly sand, very gravelly loamy sand	GP, GP-GM, SP, SP-SM	A-1	0	2-5	30-65	15-45	5-40	0-10	0-20	NP-3
		39-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Roliss-----	7	0-14	Loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	80-100	80-100	60-90	20-40	5-20
		14-20	Loam, clay loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		20-80	Clay loam, loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
			In			Pct	Pct					Pct	
I61A: Kratka-----	5	0-11	Fine sandy loam	SC-SM, SM	A-4	0	0	95-100	90-100	50-80	35-50	0-25	NP-10
		11-18	Loamy sand, sand, loamy fine sand	SW-SM, SP-SM, SM	A-2-4, A-3	0	0	95-100	90-100	50-80	5-35	0-20	NP-3
		18-25	Loamy sand, sand, fine sand	SM, SP-SM, SW-SM	A-2-4, A-2, A-3	0	0	95-100	90-100	50-80	5-35	0-20	NP-3
		25-80	Clay loam, loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Foxhome-----	4	0-10	Sandy loam	SM	A-4	0	0-2	95-100	90-100	75-90	35-50	0-25	NP-10
		10-15	Fine sand, loamy sand, sand	SM, SW-SM	A-2, A-3	0	0-3	75-95	65-90	45-80	5-35	0-25	NP-5
		15-23	Very gravelly sand, very gravelly coarse sand, very gravelly loamy sand	GP-GM, SP, SP-SM, GP	A-1	0	2-5	30-65	15-45	5-40	0-10	0-20	NP-1
		23-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Hangaard-----	3	0-10	Sandy loam	SM	A-2-4, A-4	0	0-3	95-100	80-100	50-75	15-45	0-25	NP-10
		10-15	Loamy sand, coarse sandy loam, loamy coarse sand	SM, SP-SM	A-1, A-2-4, A-3	0	0-3	95-100	80-95	40-70	5-25	0-20	NP-5
		15-80	Gravelly coarse sand, gravelly sand, coarse sand	SP, SP-SM	A-1, A-2, A-3	0	0-3	70-95	55-90	30-60	0-10	0-20	NP-3
Northwood-----	3	0-9	Muck	PT	A-8	0	0	100	100	---	---	---	---
		9-14	Fine sandy loam, loamy fine sand, loamy sand	SC-SM, SM	A-2-4, A-4, A-2	0	0-3	95-100	90-100	50-85	15-50	0-25	NP-10
		14-24	Coarse sand, fine sand, loamy fine sand	SM, SP-SM	A-2, A-3, A-2-4	0	0-3	95-100	80-100	70-95	5-35	0-15	NP-3
		24-80	Loam, clay loam	CL-ML, CL	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I62A: Syrene-----	70	0-9	Sandy loam	SC-SM, SM	A-4	0-1	0-3	95-100	80-100	60-75	20-45	0-25	NP-10
		9-17	Loam, sandy loam, sandy clay loam	CL-ML, SC-SM, CL, SC	A-4	0	0-5	95-100	85-100	50-75	15-65	20-35	5-15
		17-27	Stratified loamy fine sand to gravelly coarse sand	SP, SP-SM	A-1, A-2, A-3	0-1	0-5	70-95	55-80	30-60	0-10	0-20	NP-3
		27-60	Stratified loamy fine sand to gravelly coarse sand	SP, SP-SM	A-1, A-2, A-3	0-1	0-5	70-95	55-80	30-60	0-10	0-20	NP-3
Rosewood-----	11	0-8	Fine sandy loam	SC, SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-90	30-50	0-25	NP-10
		8-18	Fine sandy loam, sandy loam, loamy fine sand	SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	20-30	NP-10
		18-80	Fine sand, sand	SM, SP-SM	A-1, A-2-4, A-3	0	0	85-100	75-100	45-75	5-35	0-20	NP-3
Hangaard-----	5	0-10	Sandy loam	SM	A-2-4, A-4	0	0-3	95-100	80-100	50-75	15-45	0-25	NP-10
		10-15	Loamy sand, coarse sandy loam, loamy coarse sand	SM, SP-SM	A-1, A-2-4, A-3	0	0-3	95-100	80-95	40-70	5-25	0-20	NP-5
		15-80	Gravelly coarse sand, gravelly sand, coarse sand	SP, SP-SM	A-1, A-2, A-3	0	0-3	70-95	55-90	30-60	0-10	0-20	NP-3
Karlsruhe-----	4	0-15	Sandy loam	SM, SC, SC-SM	A-4, A-2	0	0-3	95-100	85-100	55-90	15-50	0-25	NP-10
		15-30	Sandy loam, loamy sand	SM, SC, SC-SM	A-2, A-4, A-1	0	0-3	95-100	85-100	45-75	10-40	0-25	NP-10
		30-60	Coarse sand, gravelly coarse sand, gravelly sand	GP-GM, SP, SM, GP, SP-SM	A-1, A-2, A-3	0	0-5	45-90	30-80	20-70	0-15	0-20	NP-1

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
			In			Pct	Pct					Pct	
I62A: Deerwood-----	3	0-10	Muck	PT	A-8	0	0	100	100	---	---	---	---
		10-12	Fine sand, loamy sand, fine sandy loam	SM, SC-SM	A-2-4, A-4	0	0-2	95-100	90-100	50-75	15-50	0-25	NP-10
		12-60	Fine sand, sand, gravelly sand	SM, SP, SP-SM	A-1, A-2, A-3	0	0-5	75-100	55-100	35-70	0-25	0-20	NP-3
Hamar-----	3	0-12	Loamy fine sand	SM, SC-SM	A-2-4	0	0	100	95-100	50-80	15-35	0-20	NP-5
		12-17	Loamy fine sand, loamy sand, fine sand	SC-SM, SM, SP-SM	A-2-4	0	0	100	95-100	50-80	10-35	0-20	NP-3
		17-40	Fine sand, loamy sand, loamy fine sand	SC-SM, SM, SP-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-35	0-20	NP-3
		40-47	Loamy fine sand	SC-SM, SM	A-2-4	0	0	100	95-100	50-80	15-35	0-20	NP-5
		47-60	Fine sand, loamy sand, loamy fine sand	SC-SM, SM, SP-SM	A-3, A-2-4	0	0	100	95-100	50-80	5-35	0-20	NP-3
Strandquist-----	2	0-10	Loam	CL-ML, CL	A-4	0	0	95-100	80-100	75-90	50-75	20-30	5-10
		10-20	Gravelly sand, gravelly coarse sand, very gravelly sand	GP, GP-GM, SP, SP-SM, GW-GM	A-1	0	2-5	30-65	15-45	5-40	0-10	0-20	NP-3
		20-60	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Radium-----	1	0-14	Loamy sand	SM, SW-SM	A-2-4	0	0	95-100	95-100	50-70	5-25	0-20	NP-5
		14-33	Sand, loamy sand, gravelly loamy coarse sand	SP, SM, SP-SM	A-1, A-2, A-3	0	0-5	75-100	65-95	35-60	3-15	0-20	NP-3
		33-43	Gravelly sand, gravelly coarse sand, very gravelly coarse sand	GW, GW-GM, SP, SP-SM	A-1	0	0-5	45-90	30-75	15-40	0-10	0-20	NP-3
		43-80	Sand, coarse sand, loamy sand	SM, SW-SM, SP-SM	A-1, A-2, A-3	0	0-5	85-100	75-95	40-75	5-20	0-20	NP-3

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I62A: Wyandotte-----	1	0-8	Clay loam	CL	A-6	0-1	0-3	95-100	85-100	70-95	50-70	30-40	10-15
		8-15	Loam, sandy clay loam	CL, CL-ML	A-4	0	0-3	95-100	80-95	60-90	50-65	20-35	5-10
		15-34	Gravelly loamy coarse sand, gravelly sand, very gravelly loamy coarse sand	GP-GM, GP, SP-SM, SP	A-1	0	2-5	20-65	15-45	5-40	0-10	0-20	NP-3
		34-60	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
I63A: Thiefriever-----	70	0-12	Fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0	0	95-100	80-100	70-90	35-55	0-25	NP-10
		12-23	Fine sandy loam, sandy loam, loamy fine sand	SM, SC-SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	20-30	NP-10
		23-32	Fine sand, loamy fine sand, loamy sand	SM, SP-SM	A-2-4, A-2, A-3	0	0-3	90-100	80-100	50-80	5-35	0-20	NP-3
		32-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Espelie-----	10	0-9	Fine sandy loam	CL, ML, SC, SM	A-2-4, A-4	0	0	95-100	85-100	60-85	30-65	0-25	NP-10
		9-24	Loamy sand, loamy fine sand, fine sand	SM, SP-SM	A-2, A-3, A-1, A-2-4	0	0-5	85-100	60-100	30-80	5-40	0-20	NP-3
		24-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I63A: Foxlake-----	7	0-19	Loam	CL-ML, CL	A-4, A-6	0-1	0-2	95-100	90-100	75-90	50-80	20-40	5-20
		19-38	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
		38-49	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
		49-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Huot-----	5	0-14	Fine sandy loam	SM, SC-SM	A-4	0	0	90-100	75-100	50-85	25-55	0-30	NP-10
		14-26	Loamy fine sand, fine sandy loam	SM, SC-SM	A-2-4, A-4	0	0	95-100	95-100	60-85	25-55	15-25	NP-10
		26-34	Loamy fine sand, fine sand	SP-SM, SM	A-2-4, A-2, A-3	0	0	90-100	75-100	50-80	5-35	0-20	NP-3
		34-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Clearwater, depressional---	3	0-8	Mucky clay loam	CL	A-6	0	0-3	95-100	95-100	80-95	60-85	25-40	10-20
		8-35	Clay, silty clay, silty clay loam	CH, CL	A-7	0-1	0-1	95-100	95-100	90-100	70-95	40-70	20-45
		35-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Rosewood-----	3	0-8	Fine sandy loam	SC, SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-90	30-50	0-25	NP-10
		8-18	Fine sandy loam, sandy loam, loamy fine sand	SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	20-30	NP-10
		18-80	Fine sand, sand	SM, SP-SM	A-1, A-2-4, A-3	0	0	85-100	75-100	45-75	5-35	0-20	NP-3
Ulen-----	1	0-9	Fine sandy loam	SC, SC-SM, SM	A-4	0	0	100	100	80-100	35-50	0-25	NP-10
		9-42	Fine sandy loam, sandy loam, loamy fine sand	SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	15-25	NP-10
		42-60	Fine sand, sand	SM, SP-SM	A-1, A-2, A-3	0	0	85-100	75-95	45-75	5-25	0-20	NP-3

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I63A: Wyandotte-----	1	0-8	Clay loam	CL	A-6	0-1	0-3	95-100	85-100	70-95	50-70	30-40	10-15
		8-15	Loam, sandy clay loam	CL, CL-ML	A-4	0	0-3	95-100	80-95	60-90	50-65	20-35	5-10
		15-34	Gravelly loamy coarse sand, gravelly sand, very gravelly loamy coarse sand	GP-GM, GP, SP-SM, SP	A-1	0	2-5	20-65	15-45	5-40	0-10	0-20	NP-3
		34-60	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
I64A: Ulen-----	70	0-9	Fine sandy loam	SC, SC-SM, SM	A-4	0	0	100	100	80-100	35-50	0-25	NP-10
		9-42	Fine sandy loam, sandy loam, loamy fine sand	SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	15-25	NP-10
		42-60	Fine sand, sand	SM, SP-SM	A-1, A-2-4, A-3	0	0	85-100	75-95	45-75	5-25	0-20	NP-3
Rosewood-----	10	0-8	Fine sandy loam	SC, SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-90	30-50	0-25	NP-10
		8-18	Fine sandy loam, sandy loam, loamy fine sand	SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	20-30	NP-10
		18-80	Fine sand, sand	SM, SP-SM	A-1, A-2-4, A-3	0	0	85-100	75-100	45-75	5-35	0-20	NP-3
Flaming-----	8	0-12	Loamy fine sand	SM, SC-SM	A-2-4	0	0	100	95-100	65-80	15-30	0-20	NP-5
		12-17	Fine sand, loamy sand, sand	SM, SW-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-30	0-20	NP-3
		17-27	Fine sand, loamy sand, sand	SM, SW-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-30	0-20	NP-3
		27-60	Fine sand, loamy sand, sand	SM, SW-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-30	0-20	NP-3

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
			In			Pct	Pct					Pct	
I64A: Karlsruhe-----	5	0-15	Sandy loam	SM, SC, SC-SM	A-4, A-2	0	0-3	95-100	85-100	55-90	15-50	0-25	NP-10
		15-30	Sandy loam, loamy sand	SM, SC, SC-SM	A-2, A-4, A-1	0	0-3	95-100	85-100	45-75	10-40	0-25	NP-10
		30-60	Coarse sand, gravelly coarse sand, gravelly sand	GP-GM, SP, SM, GP, SP-SM	A-1, A-2, A-3	0	0-5	45-90	30-80	20-70	0-15	0-20	NP-1
Radium-----	3	0-14	Loamy sand	SM, SW-SM	A-2-4	0	0	95-100	95-100	50-70	5-25	0-20	NP-5
		14-33	Sand, loamy sand, gravelly loamy coarse sand	SM, SP, SP-SM	A-1, A-2-4, A-3	0	0-5	75-100	65-95	35-60	3-15	0-20	NP-3
		33-43	Gravelly sand, gravelly coarse sand, very gravelly coarse sand	GW, GW-GM, SP, SP-SM	A-1	0	0-5	45-90	30-75	15-40	0-10	0-20	NP-3
		43-80	Sand, coarse sand, loamy sand	SM, SW-SM, SP-SM	A-1, A-2, A-3	0	0-5	85-100	75-95	40-75	5-20	0-20	NP-3
Strathcona-----	2	0-10	Fine sandy loam	ML, SC-SM, SM, CL-ML	A-4	0	0	95-100	90-100	70-85	40-55	0-25	NP-10
		10-17	Fine sandy loam, sandy loam, loamy fine sand	SM, SC-SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	20-30	NP-10
		17-28	Sand, fine sand, loamy fine sand	SM, SP-SM	A-2, A-3, A-2-4	0	0-1	95-100	90-100	50-80	5-30	0-20	NP-3
		28-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I64A: Thiefriever-----	2	0-12	Fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0	0	95-100	80-100	70-90	35-55	0-25	NP-10
		12-23	Fine sandy loam, sandy loam, loamy fine sand	SM, SC-SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	20-30	NP-10
		23-32	Fine sand, loamy fine sand, loamy sand	SM, SP-SM	A-2-4, A-2, A-3	0	0-3	90-100	80-100	50-80	5-35	0-20	NP-3
		32-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
I65A: Ulen-----	70	0-9	Loamy fine sand	SM	A-2-4	0	0	100	95-100	50-80	15-30	0-20	NP-5
		9-42	Fine sandy loam, sandy loam, loamy fine sand	SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	15-25	NP-10
		42-60	Fine sand, sand	SM, SP-SM	A-1, A-2-4, A-3	0	0	85-100	75-95	45-75	5-25	0-20	NP-3
Rosewood-----	10	0-8	Fine sandy loam	SC, SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-90	30-50	0-25	NP-10
		8-18	Fine sandy loam, sandy loam, loamy fine sand	SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	20-30	NP-10
		18-80	Fine sand, sand	SM, SP-SM	A-1, A-2-4, A-3	0	0	85-100	75-100	45-75	5-35	0-20	NP-3
Flaming-----	6	0-12	Loamy fine sand	SM, SC-SM	A-2-4	0	0	100	95-100	65-80	15-30	0-20	NP-5
		12-17	Fine sand, loamy sand, sand	SM, SW-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-30	0-20	NP-3
		17-27	Fine sand, loamy sand, sand	SM, SW-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-30	0-20	NP-3
		27-60	Fine sand, loamy sand, sand	SM, SW-SM	A-2-4, A-3	0	0	100	95-100	50-80	5-30	0-20	NP-3

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I65A: Poppleton-----	4	0-6	Fine sand	SM, SC-SM	A-2-4	0	0	95-100	95-100	65-80	15-30	0-20	NP-5
		6-9	Fine sand, sand	SM	A-2-4, A-3	0	0	100	100	80-95	5-15	0-20	NP-3
		9-40	Fine sand, sand	SM	A-2-4, A-3	0	0	100	100	80-95	5-15	0-20	NP-3
		40-60	Fine sand, sand	SM	A-2-4, A-3	0	0	100	100	80-95	5-15	0-20	NP-3
Karlsruhe-----	3	0-15	Sandy loam	SM, SC, SC-SM	A-4, A-2	0	0-3	95-100	85-100	55-90	15-50	0-25	NP-10
		15-30	Sandy loam, loamy sand	SM, SC, SC-SM	A-2, A-4, A-1	0	0-3	95-100	85-100	45-75	10-40	0-25	NP-10
		30-60	Coarse sand, gravelly coarse sand, gravelly sand	GP-GM, SP, SM, GP, SP-SM	A-1, A-2, A-3	0	0-5	45-90	30-80	20-70	0-15	0-20	NP-1
Radium-----	3	0-14	Loamy sand	SM, SW-SM	A-2-4	0	0	95-100	95-100	50-70	5-25	0-20	NP-5
		14-33	Sand, loamy sand, gravelly loamy coarse sand	SM, SP, SP-SM	A-1, A-2, A-3	0	0-5	75-100	65-95	35-60	3-15	0-20	NP-3
		33-43	Gravelly sand, gravelly coarse sand, very gravelly coarse sand	GW, GW-GM, SP, SP-SM	A-1	0	0-5	45-90	30-75	15-40	0-10	0-20	NP-3
		43-80	Sand, coarse sand, loamy sand	SM, SW-SM, SP-SM	A-1, A-2, A-3	0	0-5	85-100	75-95	40-75	5-20	0-20	NP-3
Strathcona-----	2	0-10	Fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0	0	95-100	90-100	70-85	40-55	0-25	NP-10
		10-17	Fine sandy loam, sandy loam, loamy fine sand	SM, SC-SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	20-30	NP-10
		17-28	Sand, fine sand, loamy fine sand	SM, SP-SM	A-2-4, A-3, A-2	0	0-1	95-100	90-100	50-80	5-30	0-20	NP-3
		28-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I65A: Thiefriever-----	2	0-12	Fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0	0	95-100	80-100	70-90	35-55	0-25	NP-10
		12-23	Fine sandy loam, sandy loam, loamy fine sand	SM, SC-SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	20-30	NP-10
		23-32	Fine sand, loamy fine sand, loamy sand	SM, SP-SM	A-2-4, A-2, A-3	0	0-3	90-100	80-100	50-80	5-35	0-20	NP-3
		32-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
I66A: Vallars-----	75	0-12	Loam	CL-ML, CL	A-4	0-1	0-2	95-100	90-100	80-90	50-80	20-40	5-20
		12-21	Clay loam, loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		21-60	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Vallars, very cobbly-----	7	0-12	Loam	CL-ML, CL	A-4	0-1	0-2	95-100	90-100	80-90	50-80	20-40	5-20
		12-21	Clay loam, loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		21-60	Clay loam, loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Hamerly-----	6	0-8	Loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	90-100	80-95	60-90	20-40	5-20
		8-25	Loam, clay loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		25-60	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Grimstad-----	3	0-9	Fine sandy loam	SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-90	20-50	0-30	NP-10
		9-22	Loamy sand, loamy fine sand, fine sand	SM, SC-SM	A-2-4, A-4	0	0	100	95-100	65-85	15-50	15-25	NP-10
		22-28	Loamy sand, loamy fine sand, fine sand	SM, SW-SM	A-2, A-2-4, A-3	0	0	100	95-100	80-90	5-35	0-20	NP-3
		28-60	Loam, clay loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I66A: Mavie-----	3	0-12	Fine sandy loam	SC-SM, SM	A-4	0	0-3	95-100	90-100	50-80	35-50	0-25	NP-10
		12-18	Loam, fine sandy loam, sandy loam	SM, CL-ML, SC, SC-SM	A-4, A-6	0	0-5	95-100	85-100	65-95	15-75	20-35	NP-15
		18-39	Very gravelly coarse sand, very gravelly sand, very gravelly loamy sand	GP, GP-GM, SP, SP-SM	A-1	0	2-5	30-65	15-45	5-40	0-10	0-20	NP-3
		39-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Roliss, depressional---	3	0-14	Loam	CL, CL-ML	A-4, A-6	0-1	0-1	95-100	85-95	80-95	60-85	20-40	5-20
		14-20	Clay loam, loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		20-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Strathcona-----	3	0-10	Fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0	0	95-100	90-100	70-85	40-55	0-25	NP-10
		10-17	Fine sandy loam, sandy loam, loamy fine sand	SM, SC-SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	20-30	NP-10
		17-28	Sand, fine sand, loamy fine sand	SM, SP-SM	A-3, A-2, A-2-4	0	0-1	95-100	90-100	50-80	5-30	0-20	NP-3
		28-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
I67A: Wheatville-----	70	0-9	Loam	ML	A-4	0	0	100	100	95-100	70-95	20-40	NP-10
		9-31	Silt loam, very fine sandy loam, loam	CL-ML, ML, CL	A-4	0	0	100	100	90-100	85-95	0-30	NP-10
		31-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I67A: Augsburg-----	13	0-11	Loam	ML	A-4	0	0	100	100	95-100	70-95	20-40	NP-10
		11-18	Loam, very fine sandy loam, silt loam	ML, CL-ML	A-4	0	0	100	100	95-100	80-90	0-30	NP-10
		18-33	Loamy very fine sand, very fine sandy loam, loam, very fine sand	ML, CL-ML	A-4	0	0	100	100	95-100	75-90	0-30	NP-10
		33-60	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Glyndon-----	8	0-11	Very fine sandy loam	CL, CL-ML, ML	A-4	0	0	100	100	95-100	50-90	20-30	NP-10
		11-28	Silt loam, very fine sandy loam, loam	CL-ML, ML	A-4	0	0	100	100	90-100	85-95	0-30	NP-10
		28-60	Loamy very fine sand, very fine sand, very fine sandy loam	CL-ML, ML, SM	A-4	0	0	100	100	85-100	45-90	0-30	NP-10
Foxlake-----	5	0-19	Loam	CL-ML, CL	A-4, A-6	0-1	0-2	95-100	90-100	75-90	50-80	20-40	5-20
		19-38	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
		38-49	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
		49-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Hilaire-----	2	0-10	Loamy fine sand	SM, SC-SM	A-2-4	0	0	100	95-100	65-85	15-30	0-20	NP-5
		10-34	Fine sand, loamy fine sand, sand	SM, SP-SM	A-1, A-3, A-2-4	0	0-5	85-100	75-100	45-85	5-40	0-20	NP-3
		34-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I67A: Ulen-----	2	0-9	Loamy fine sand	SM	A-2-4	0	0	100	95-100	50-80	15-30	0-20	NP-5
		9-42	Fine sandy loam, sandy loam, loamy fine sand	SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	15-25	NP-10
		42-60	Fine sand, sand	SM, SP-SM	A-1, A-2-4, A-3	0	0	85-100	75-95	45-75	5-25	0-20	NP-3
I68A: Wheatville-----	70	0-9	Very fine sandy loam	CL, CL-ML, ML	A-4	0	0	100	100	90-100	50-95	15-35	NP-10
		9-31	Silt loam, very fine sandy loam, loam	CL-ML, ML, CL	A-4	0	0	100	100	90-100	85-95	0-30	NP-10
		31-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Augsburg-----	13	0-11	Loam	ML	A-4	0	0	100	100	95-100	70-95	20-40	NP-10
		11-18	Loam, very fine sandy loam, silt loam	ML, CL-ML	A-4	0	0	100	100	95-100	80-90	0-30	NP-10
		18-33	Loamy very fine sand, very fine sandy loam, loam, very fine sand	ML, CL-ML	A-4	0	0	100	100	95-100	75-90	0-30	NP-10
		33-60	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Glyndon-----	8	0-11	Very fine sandy loam	CL, CL-ML, ML	A-4	0	0	100	100	95-100	50-90	20-30	NP-10
		11-28	Silt loam, very fine sandy loam, loam	CL-ML, ML	A-4	0	0	100	100	90-100	85-95	0-30	NP-10
		28-60	Loamy very fine sand, very fine sand, very fine sandy loam	CL-ML, ML, SM	A-4	0	0	100	100	85-100	45-90	0-30	NP-10

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I68A:													
Foxlake-----	5	0-19	Loam	CL-ML, CL	A-4, A-6	0-1	0-2	95-100	90-100	75-90	50-80	20-40	5-20
		19-38	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
		38-49	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
		49-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Hilaire-----	2	0-10	Loamy fine sand	SM, SC-SM	A-2-4	0	0	100	95-100	65-85	15-30	0-20	NP-5
		10-34	Fine sand, loamy fine sand, sand	SM, SP-SM	A-1, A-3, A-2-4	0	0-5	85-100	75-100	45-85	5-40	0-20	NP-3
		34-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Ulen-----	2	0-9	Loamy fine sand	SM	A-2-4	0	0	100	95-100	50-80	15-30	0-20	NP-5
		9-42	Fine sandy loam, sandy loam, loamy fine sand	SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	15-25	NP-10
		42-60	Fine sand, sand	SM, SP-SM	A-1, A-2-4, A-3	0	0	85-100	75-95	45-75	5-25	0-20	NP-3
I69A:													
Wyandotte-----	65	0-8	Clay loam	CL	A-6	0-1	0-3	95-100	85-100	70-95	50-70	30-40	10-15
		8-15	Loam, sandy clay loam	CL, CL-ML	A-4	0	0-3	95-100	80-95	60-90	50-65	20-35	5-10
		15-34	Gravelly loamy coarse sand, gravelly sand, very gravelly loamy coarse sand	GP-GM, GP, SP-SM, SP	A-1	0	2-5	20-65	15-45	5-40	0-10	0-20	NP-3
		34-60	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
			In			Pct	Pct					Pct	
I69A:													
Foxlake-----	10	0-19	Loam	CL-ML, CL	A-4, A-6	0-1	0-2	95-100	90-100	75-90	50-80	20-40	5-20
		19-38	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
		38-49	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
		49-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Espelie-----	8	0-9	Fine sandy loam	CL, ML, SC, SM	A-2-4, A-4	0	0	95-100	85-100	60-85	30-65	0-25	NP-10
		9-24	Loamy sand, loamy fine sand, fine sand	SM, SP-SM	A-2, A-3, A-1, A-2-4	0	0-5	85-100	60-100	30-80	5-40	0-20	NP-3
		24-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Clearwater, depressional---	5	0-8	Mucky clay loam	CL	A-6	0	0-3	95-100	95-100	80-95	60-85	25-40	10-20
		8-35	Clay, silty clay, silty clay loam	CH, CL	A-7	0-1	0-1	95-100	95-100	90-100	70-95	40-70	20-45
		35-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45
Thiefriever-----	5	0-12	Fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0	0	95-100	80-100	70-90	35-55	0-25	NP-10
		12-23	Fine sandy loam, sandy loam, loamy fine sand	SM, SC-SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	20-30	NP-10
		23-32	Fine sand, loamy fine sand, loamy sand	SM, SP-SM	A-2-4, A-2, A-3	0	0-3	90-100	80-100	50-80	5-35	0-20	NP-3
		32-80	Silty clay, clay, silty clay loam	CH	A-7	0-1	0-3	95-100	95-100	90-100	75-95	40-70	20-45

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I69A:													
Karlsruhe-----	4	0-15	Sandy loam	SM, SC, SC-SM	A-4, A-2	0	0-3	95-100	85-100	55-90	15-50	0-25	NP-10
		15-30	Sandy loam, loamy sand	SM, SC, SC-SM	A-2, A-4, A-1	0	0-3	95-100	85-100	45-75	10-40	0-25	NP-10
		30-60	Coarse sand, gravelly coarse sand, gravelly sand	GP-GM, SP, SM, GP, SP-SM	A-1, A-2, A-3	0	0-5	45-90	30-80	20-70	0-15	0-20	NP-1
Syrene-----	3	0-9	Sandy loam	SC-SM, SM	A-4	0-1	0-3	95-100	80-100	60-75	20-45	0-25	NP-10
		9-17	Loam, sandy loam, sandy clay loam	CL-ML, SC-SM, CL, SC	A-4	0	0-5	95-100	85-100	50-75	15-65	20-35	5-15
		17-27	Stratified loamy fine sand to gravelly coarse sand	SP, SP-SM	A-1, A-2, A-3	0-1	0-5	70-95	55-80	30-60	0-10	0-20	NP-3
		27-60	Stratified loamy fine sand to gravelly coarse sand	SP, SP-SM	A-1, A-2, A-3	0-1	0-5	70-95	55-80	30-60	0-10	0-20	NP-3
I70A:													
Strathcona-----	70	0-10	Fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0	0	95-100	90-100	70-85	40-55	0-25	NP-10
		10-17	Fine sandy loam, sandy loam, loamy fine sand	SM, SC-SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	20-30	NP-10
		17-28	Sand, fine sand, loamy fine sand	SM, SP-SM	A-2-4, A-3, A-2	0	0-1	95-100	90-100	50-80	5-30	0-20	NP-3
		28-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Kratka-----	10	0-11	Fine sandy loam	SC-SM, SM	A-4	0	0	95-100	90-100	50-80	35-50	0-25	NP-10
		11-18	Loamy sand, sand, loamy fine sand	SW-SM, SP-SM, SM	A-2-4, A-3	0	0	95-100	90-100	50-80	5-35	0-20	NP-3
		18-25	Loamy sand, sand, fine sand	SM, SP-SM, SW-SM	A-2-4, A-2, A-3	0	0	95-100	90-100	50-80	5-35	0-20	NP-3
		25-80	Clay loam, loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
<b>I70A:</b>													
Roliss-----	6	0-14	Loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	80-100	80-100	60-90	20-40	5-20
		14-20	Clay loam, loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
		20-80	Loam, clay loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Grimstad-----	5	0-9	Fine sandy loam	SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-90	20-50	0-30	NP-10
		9-22	Loamy sand, loamy fine sand, fine sand	SM, SC-SM	A-2-4, A-4	0	0	100	95-100	65-85	15-50	15-25	NP-10
		22-28	Loamy sand, loamy fine sand, fine sand	SM, SW-SM	A-2, A-2-4, A-3	0	0	100	95-100	80-90	5-35	0-20	NP-3
		28-60	Loam, clay loam	CL, CL-ML	A-4, A-6	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Mavie-----	3	0-12	Fine sandy loam	SC-SM, SM	A-4	0	0-3	95-100	90-100	50-80	35-50	0-25	NP-10
		12-18	Loam, fine sandy loam, sandy loam	SM, CL-ML, SC, SC-SM	A-4, A-6	0	0-5	95-100	85-100	65-95	15-75	20-35	NP-15
		18-39	Very gravelly coarse sand, very gravelly sand, very gravelly loamy sand	GP, GP-GM, SP, SP-SM	A-1	0	2-5	30-65	15-45	5-40	0-10	0-20	NP-3
		39-80	Clay loam, loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
Rosewood-----	3	0-8	Fine sandy loam	SC, SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-90	30-50	0-25	NP-10
		8-18	Fine sandy loam, sandy loam, loamy fine sand	SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	20-30	NP-10
		18-80	Fine sand, sand	SM, SP-SM	A-1, A-2-4, A-3	0	0	85-100	75-100	45-75	5-35	0-20	NP-3

Table 22.--Engineering Index Properties--Continued

Map symbol and soil name	Pct. of map unit	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	>10	3-10	4	10	40	200		
						inches	inches						
		In				Pct	Pct					Pct	
I70A: Strathcona, depressional---	3	0-10	Mucky fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0	0	95-100	90-100	70-85	40-55	0-25	NP-10
		10-17	Fine sandy loam, sandy loam, loamy fine sand	SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	65-85	15-50	20-30	NP-10
		17-28	Sand, fine sand, loamy fine sand	SM, SP-SM	A-2-4, A-3, A-2	0	0-1	95-100	90-100	50-80	5-30	0-20	NP-3
		28-80	Clay loam, loam	CL, CL-ML	A-6, A-4	0-1	0-5	95-100	85-95	75-90	50-75	25-40	5-20
M-W. Miscellaneous water													
W. Water													

Table 23.--Physical Properties of the Soils

(Entries under "Erosion factors--T" apply to the entire profile. Entries under "Wind erodibility group" and "Wind erodibility index" apply only to the surface layer. Absence of an entry indicates that data were not estimated)

Map symbol and soil name	Pct. of map unit	Depth	Clay	Moist bulk density	Permea- bility	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
		In	Pct	g/cc	In/hr	In/in	Pct	Pct					
<b>B109A:</b>													
Bowstring-----	45	0-38	0-5	0.15-0.35	0.20-6.00	0.35-0.45	---	40-90	.02	.02	2	8	0
		38-47	1-12	1.40-1.60	0.60-20	0.08-0.14	0.0-2.9	2.0-10	.17	.20			
		47-80	0-5	0.15-0.35	0.20-6.00	0.35-0.45	---	40-90	.02	.02			
Fluvaquents-----	40	0-16	5-15	1.20-1.50	2.00-20	0.16-0.24	0.0-2.9	3.0-10	.20	.20	5	5	56
		16-80	1-27	1.40-1.65	0.60-20	0.04-0.20	0.0-2.9	0.5-3.0	.17	.20			
Hapludalfs-----	5	0-6	10-18	1.30-1.45	2.00-6.00	0.16-0.18	0.0-2.9	0.5-2.0	.20	.20	5	3	86
		6-8	5-15	1.30-1.55	2.00-20	0.10-0.18	0.0-2.9	0.2-1.0	.20	.20			
		8-25	18-35	1.25-1.65	0.20-2.00	0.15-0.19	3.0-5.9	0.2-1.0	.37	.37			
		25-80	10-27	1.30-1.60	0.60-6.00	0.14-0.19	0.0-2.9	0.0-0.5	.32	.32			
Seelyeville-----	5	0-10	0-0	0.10-0.25	0.20-6.00	0.35-0.48	---	75-99	.02	.02	3	2	134
		10-80	0-0	0.10-0.25	0.20-6.00	0.35-0.48	---	75-99	.02	.02			
Water-----	5	---	---	---	---	---	---	---	---	---	-	---	---
<b>B200A:</b>													
Garnes-----	70	0-6	5-15	1.10-1.35	2.00-6.00	0.16-0.18	0.0-2.9	0.5-3.0	.20	.24	5	3	86
		6-9	1-10	1.35-1.55	6.00-20	0.05-0.12	0.0-2.9	0.2-1.0	.15	.15			
		9-14	18-30	1.50-1.65	0.60-2.00	0.17-0.20	3.0-5.9	0.2-1.0	.32	.32			
		14-72	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
		72-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Chilgren-----	13	0-4	5-18	1.30-1.60	2.00-6.00	0.16-0.18	0.0-2.9	1.0-3.0	.28	.28	5	3	86
		4-10	1-10	1.35-1.55	6.00-20	0.05-0.12	0.0-2.9	0.2-1.0	.15	.15			
		10-18	18-30	1.50-1.65	0.60-2.00	0.17-0.20	3.0-5.9	0.2-1.0	.32	.32			
		18-72	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
		72-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Eckvoll-----	5	0-9	2-10	1.20-1.40	6.00-20	0.10-0.12	0.0-2.9	0.5-3.0	.17	.17	5	2	134
		9-25	1-10	1.35-1.55	6.00-20	0.05-0.12	0.0-2.9	0.1-1.0	.15	.15			
		25-32	18-35	1.40-1.70	0.20-2.00	0.16-0.18	3.0-5.9	0.1-1.0	.37	.37			
		32-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			

Table 23.--Physical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Clay	Moist bulk density	Permea- bility	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
		In	Pct	g/cc	In/hr	In/in	Pct	Pct					
<b>B200A:</b>													
Garnes, very stony----	5	0-6	7-20	1.30-1.50	0.60-2.00	0.18-0.20	0.0-2.9	0.5-3.0	.32	.32	5	6	48
		6-9	1-10	1.35-1.55	6.00-20	0.05-0.12	0.0-2.9	0.2-1.0	.15	.15			
		9-14	18-30	1.50-1.65	0.60-2.00	0.17-0.20	3.0-5.9	0.2-1.0	.32	.32			
		14-72	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
		72-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Grygla-----	4	0-6	2-15	1.40-1.60	6.00-20	0.13-0.15	0.0-2.9	1.0-4.0	.15	.15	5	2	134
		6-26	1-10	1.50-1.70	6.00-20	0.06-0.11	0.0-2.9	0.5-1.0	.15	.15			
		26-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Pelan-----	3	0-6	5-15	1.10-1.35	2.00-6.00	0.13-0.15	0.0-2.9	1.0-3.0	.20	.24	5	3	86
		6-9	1-10	1.35-1.55	6.00-20	0.05-0.12	0.0-2.9	0.2-1.0	.15	.15			
		9-14	15-25	1.45-1.65	6.00-20	0.03-0.11	0.0-2.9	0.2-1.0	.20	.24			
		14-20	1-5	1.50-1.70	6.00-20	0.02-0.07	0.0-2.9	0.0-0.5	.05	.15			
		20-60	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
<b>B201A:</b>													
Chilgren-----	75	0-4	5-18	1.30-1.60	2.00-6.00	0.16-0.18	0.0-2.9	1.0-3.0	.28	.28	5	3	86
		4-10	1-10	1.35-1.55	6.00-20	0.05-0.12	0.0-2.9	0.2-1.0	.15	.15			
		10-18	18-30	1.50-1.65	0.60-2.00	0.17-0.20	3.0-5.9	0.2-1.0	.32	.32			
		18-72	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
		72-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Garnes-----	9	0-6	5-15	1.10-1.35	2.00-6.00	0.16-0.18	0.0-2.9	0.5-3.0	.20	.24	5	3	86
		6-9	1-10	1.35-1.55	6.00-20	0.05-0.12	0.0-2.9	0.2-1.0	.15	.15			
		9-14	18-30	1.50-1.65	0.60-2.00	0.17-0.20	3.0-5.9	0.2-1.0	.32	.32			
		14-72	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
		72-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Grygla-----	5	0-6	2-15	1.40-1.60	6.00-20	0.13-0.15	0.0-2.9	1.0-4.0	.15	.15	5	2	134
		6-26	1-10	1.50-1.70	6.00-20	0.06-0.11	0.0-2.9	0.5-1.0	.15	.15			
		26-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Grygla, depressional--	5	0-6	2-15	1.40-1.60	6.00-20	0.13-0.15	0.0-2.9	3.0-15	.15	.15	5	2	134
		6-26	1-10	1.50-1.70	6.00-20	0.06-0.11	0.0-2.9	0.5-1.0	.15	.15			
		26-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Hamre-----	5	0-13	0-0	0.10-0.40	0.20-6.00	0.35-0.48	---	50-95	.02	.02	5	2	134
		13-18	18-35	1.25-1.50	0.20-2.00	0.17-0.22	3.0-5.9	2.0-10	.32	.32			
		18-35	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
		35-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			

Table 23.--Physical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Clay	Moist bulk density	Permea- bility	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
		In	Pct	g/cc	In/hr	In/in	Pct	Pct					
<b>B201A:</b>													
Pelan-----	1	0-6	5-15	1.10-1.35	2.00-6.00	0.13-0.15	0.0-2.9	1.0-3.0	.20	.24	5	3	86
		6-9	1-10	1.35-1.55	6.00-20	0.05-0.12	0.0-2.9	0.2-1.0	.15	.15			
		9-14	15-25	1.45-1.65	6.00-20	0.03-0.11	0.0-2.9	0.2-1.0	.20	.24			
		14-20	1-5	1.50-1.70	6.00-20	0.02-0.07	0.0-2.9	0.0-0.5	.05	.15			
		20-60	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
<b>B202A:</b>													
Cathro-----	80	0-11	0-0	0.10-0.35	0.20-6.00	0.35-0.48	---	75-95	.02	.02	2	2	134
		11-23	0-0	0.10-0.35	0.20-6.00	0.35-0.48	---	85-95	.02	.02			
		23-60	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-1.0	.37	.37			
Hamre-----	8	0-13	0-0	0.10-0.40	0.20-6.00	0.35-0.48	---	50-95	.02	.02	5	2	134
		13-18	18-35	1.25-1.50	0.20-2.00	0.17-0.22	3.0-5.9	2.0-10	.32	.32			
		18-35	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
		35-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Chilgren-----	3	0-4	5-18	1.30-1.60	2.00-6.00	0.16-0.18	0.0-2.9	1.0-3.0	.28	.28	5	3	86
		4-10	1-10	1.35-1.55	6.00-20	0.05-0.12	0.0-2.9	0.2-1.0	.15	.15			
		10-18	18-30	1.50-1.65	0.60-2.00	0.17-0.20	3.0-5.9	0.2-1.0	.32	.32			
		18-72	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
		72-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Northwood-----	3	0-9	0-0	0.10-0.40	0.20-6.00	0.35-0.48	---	50-95	.02	.02	4	2	134
		9-14	5-15	1.25-1.45	2.00-20	0.10-0.18	0.0-2.9	2.0-10	.15	.15			
		14-24	2-8	1.45-1.70	6.00-20	0.06-0.11	0.0-2.9	0.1-0.5	.15	.15			
		24-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Berner-----	2	0-28	0-0	0.10-0.35	0.20-6.00	0.35-0.48	---	75-95	.02	.02	2	2	134
		28-31	5-15	1.25-1.45	2.00-6.00	0.10-0.18	0.0-2.9	2.0-10	.17	.24			
		31-44	0-5	1.45-1.65	6.00-20	0.05-0.10	0.0-2.9	0.1-0.5	.05	.15			
		44-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Grygla-----	2	0-6	2-15	1.40-1.60	6.00-20	0.13-0.15	0.0-2.9	1.0-4.0	.15	.15	5	2	134
		6-26	1-10	1.50-1.70	6.00-20	0.06-0.11	0.0-2.9	0.5-1.0	.15	.15			
		26-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Seelyeville-----	2	0-10	0-0	0.10-0.25	0.20-6.00	0.35-0.48	---	75-99	.02	.02	3	2	134
		10-80	0-0	0.10-0.25	0.20-6.00	0.35-0.48	---	75-99	.02	.02			
<b>B203A:</b>													
Northwood-----	75	0-9	0-0	0.10-0.40	0.20-6.00	0.35-0.48	---	50-95	.02	.02	4	2	134
		9-14	5-15	1.25-1.45	2.00-20	0.10-0.18	0.0-2.9	2.0-10	.15	.15			
		14-24	2-8	1.45-1.70	6.00-20	0.06-0.11	0.0-2.9	0.1-0.5	.15	.15			
		24-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			

Table 23.--Physical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth In	Clay Pct	Moist bulk density g/cc	Permea- bility In/hr	Available water capacity In/in	Linear extensi- bility Pct	Organic matter Pct	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
<b>B203A:</b>													
Hamre-----	10	0-13	0-0	0.10-0.40	0.20-6.00	0.35-0.48	---	50-95	.02	.02	5	2	134
		13-18	18-35	1.25-1.50	0.20-2.00	0.17-0.22	3.0-5.9	2.0-10	.32	.32			
		18-35	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
		35-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Grygla-----	7	0-6	2-15	1.40-1.60	6.00-20	0.13-0.15	0.0-2.9	1.0-4.0	.15	.15	5	2	134
		6-26	1-10	1.50-1.70	6.00-20	0.06-0.11	0.0-2.9	0.5-1.0	.15	.15			
		26-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Berner-----	5	0-28	0-0	0.10-0.35	0.20-6.00	0.35-0.48	---	75-95	.02	.02	2	2	134
		28-31	5-15	1.25-1.45	2.00-6.00	0.10-0.18	0.0-2.9	2.0-10	.17	.24			
		31-44	0-5	1.45-1.65	6.00-20	0.05-0.10	0.0-2.9	0.1-0.5	.05	.15			
		44-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Chilgren-----	3	0-4	5-18	1.30-1.60	2.00-6.00	0.16-0.18	0.0-2.9	1.0-3.0	.28	.28	5	3	86
		4-10	1-10	1.35-1.55	6.00-20	0.05-0.12	0.0-2.9	0.2-1.0	.15	.15			
		10-18	18-30	1.50-1.65	0.60-2.00	0.17-0.20	3.0-5.9	0.2-1.0	.32	.32			
		18-72	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
		72-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
<b>B204A:</b>													
Roliss-----	75	0-14	18-27	1.10-1.50	0.20-2.00	0.17-0.24	3.0-5.9	3.0-8.0	.24	.24	5	4L	86
		14-20	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.5-2.0	.37	.37			
		20-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Grygla-----	8	0-6	2-15	1.40-1.60	6.00-20	0.13-0.15	0.0-2.9	1.0-4.0	.15	.15	5	2	134
		6-26	1-10	1.50-1.70	6.00-20	0.06-0.11	0.0-2.9	0.5-1.0	.15	.15			
		26-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Chilgren-----	5	0-4	5-18	1.30-1.60	2.00-6.00	0.16-0.18	0.0-2.9	1.0-3.0	.28	.28	5	3	86
		4-10	1-10	1.35-1.55	6.00-20	0.05-0.12	0.0-2.9	0.2-1.0	.15	.15			
		10-18	18-30	1.50-1.65	0.60-2.00	0.17-0.20	3.0-5.9	0.2-1.0	.32	.32			
		18-72	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
		72-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Garnes-----	5	0-6	5-15	1.10-1.35	2.00-6.00	0.16-0.18	0.0-2.9	0.5-3.0	.20	.24	5	3	86
		6-9	1-10	1.35-1.55	6.00-20	0.05-0.12	0.0-2.9	0.2-1.0	.15	.15			
		9-14	18-30	1.50-1.65	0.60-2.00	0.17-0.20	3.0-5.9	0.2-1.0	.32	.32			
		14-72	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
		72-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Roliss, depressional--	5	0-14	15-27	1.10-1.40	0.20-2.00	0.20-0.25	3.0-5.9	3.0-15	.24	.24	5	6	48
		14-20	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	1.0-3.0	.37	.37			
		20-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			

Table 23.--Physical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Clay	Moist bulk density	Permea- bility	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
<b>B204A:</b>		<b>In</b>	<b>Pct</b>	<b>g/cc</b>	<b>In/hr</b>	<b>In/in</b>	<b>Pct</b>	<b>Pct</b>					
Hamre-----	2	0-13	0-0	0.10-0.40	0.20-6.00	0.35-0.48	---	50-95	.02	.02	5	2	134
		13-18	18-35	1.25-1.50	0.20-2.00	0.17-0.22	3.0-5.9	2.0-10	.32	.32			
		18-35	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
		35-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
<b>B205A:</b>													
Berner-----	80	0-28	0-0	0.10-0.35	0.20-6.00	0.35-0.48	---	75-95	.02	.02	2	2	134
		28-31	5-15	1.25-1.45	2.00-6.00	0.10-0.18	0.0-2.9	2.0-10	.17	.24			
		31-44	0-5	1.45-1.65	6.00-20	0.05-0.10	0.0-2.9	0.1-0.5	.05	.15			
		44-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Northwood-----	7	0-9	0-0	0.10-0.40	0.20-6.00	0.35-0.48	---	50-95	.02	.02	4	2	134
		9-14	5-15	1.25-1.45	2.00-20	0.10-0.18	0.0-2.9	2.0-10	.15	.15			
		14-24	2-8	1.45-1.70	6.00-20	0.06-0.11	0.0-2.9	0.1-0.5	.15	.15			
		24-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Grygla-----	5	0-6	2-15	1.40-1.60	6.00-20	0.13-0.15	0.0-2.9	1.0-4.0	.15	.15	5	2	134
		6-26	1-10	1.50-1.70	6.00-20	0.06-0.11	0.0-2.9	0.5-1.0	.15	.15			
		26-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Cathro-----	3	0-11	0-0	0.10-0.35	0.20-6.00	0.35-0.48	---	75-95	.02	.02	2	2	134
		11-23	0-0	0.10-0.35	0.20-6.00	0.35-0.48	---	85-95	.02	.02			
		23-60	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-1.0	.37	.37			
Hamre-----	3	0-13	0-0	0.10-0.40	0.20-6.00	0.35-0.48	---	50-95	.02	.02	5	2	134
		13-18	18-35	1.25-1.50	0.20-2.00	0.17-0.22	3.0-5.9	2.0-10	.32	.32			
		18-35	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
		35-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Seelyeville-----	2	0-10	0-0	0.10-0.25	0.20-6.00	0.35-0.48	---	75-99	.02	.02	3	2	134
		10-80	0-0	0.10-0.25	0.20-6.00	0.35-0.48	---	75-99	.02	.02			
<b>B206A:</b>													
Hamre-----	80	0-13	0-0	0.10-0.40	0.20-6.00	0.35-0.48	---	50-95	.02	.02	5	2	134
		13-18	18-35	1.25-1.50	0.20-2.00	0.17-0.22	3.0-5.9	2.0-10	.32	.32			
		18-35	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
		35-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Chilgren-----	8	0-4	5-18	1.30-1.60	2.00-6.00	0.16-0.18	0.0-2.9	1.0-3.0	.28	.28	5	3	86
		4-10	1-10	1.35-1.55	6.00-20	0.05-0.12	0.0-2.9	0.2-1.0	.15	.15			
		10-18	18-30	1.50-1.65	0.60-2.00	0.17-0.20	3.0-5.9	0.2-1.0	.32	.32			
		18-72	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
		72-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			

Table 23.--Physical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Clay	Moist bulk density	Permea- bility	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
		In	Pct	g/cc	In/hr	In/in	Pct	Pct					
<b>B206A:</b>													
Northwood-----	5	0-9	0-0	0.10-0.40	0.20-6.00	0.35-0.48	---	50-95	.02	.02	4	2	134
		9-14	5-15	1.25-1.45	2.00-20	0.10-0.18	0.0-2.9	2.0-10	.15	.15			
		14-24	2-8	1.45-1.70	6.00-20	0.06-0.11	0.0-2.9	0.1-0.5	.15	.15			
		24-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Cathro-----	3	0-11	0-0	0.10-0.35	0.20-6.00	0.35-0.48	---	75-95	.02	.02	2	2	134
		11-23	0-0	0.10-0.35	0.20-6.00	0.35-0.48	---	85-95	.02	.02			
		23-60	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-1.0	.37	.37			
Grygla-----	2	0-6	2-15	1.40-1.60	6.00-20	0.13-0.15	0.0-2.9	1.0-4.0	.15	.15	5	2	134
		6-26	1-10	1.50-1.70	6.00-20	0.06-0.11	0.0-2.9	0.5-1.0	.15	.15			
		26-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Roliss-----	2	0-14	18-27	1.10-1.50	0.20-2.00	0.17-0.24	3.0-5.9	3.0-8.0	.24	.24	5	4L	86
		14-20	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.5-2.0	.37	.37			
		20-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
<b>I1A:</b>													
Augsburg-----	75	0-11	15-22	0.95-1.20	0.60-2.00	0.20-0.23	0.0-2.9	3.0-8.0	.28	.28	5	4L	86
		11-18	5-18	1.30-1.50	0.60-6.00	0.17-0.22	0.0-2.9	0.2-2.0	.28	.28			
		18-33	5-18	1.40-1.60	0.60-6.00	0.17-0.22	0.0-2.9	0.1-0.5	.28	.28			
		33-60	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Borup-----	10	0-12	15-22	0.95-1.20	0.60-2.00	0.20-0.23	0.0-2.9	3.0-8.0	.28	.28	5	4L	86
		12-34	10-18	1.30-1.50	0.60-6.00	0.17-0.22	0.0-2.9	0.2-2.0	.28	.28			
		34-60	5-18	1.35-1.65	0.60-6.00	0.08-0.22	0.0-2.9	0.0-0.5	.28	.28			
Foxlake-----	5	0-19	18-27	1.15-1.35	0.60-6.00	0.20-0.22	0.0-2.9	3.0-8.0	.24	.24	5	4L	86
		19-38	35-60	1.25-1.45	0.06-0.20	0.09-0.19	6.0-8.9	0.5-2.0	.28	.28			
		38-49	35-60	1.25-1.45	0.06-0.20	0.09-0.19	6.0-8.9	0.1-0.5	.28	.28			
		49-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Augsburg, depressional	3	0-11	10-20	1.00-1.30	0.60-2.00	0.20-0.30	0.0-2.9	3.0-15	.28	.28	5	4L	86
		11-18	5-18	1.30-1.50	0.60-6.00	0.17-0.23	0.0-2.9	0.5-2.0	.28	.28			
		18-33	5-18	1.40-1.60	0.60-6.00	0.17-0.22	0.0-2.9	0.1-0.5	.28	.28			
		33-60	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Wheatville-----	3	0-9	10-20	1.25-1.40	0.60-6.00	0.18-0.22	0.0-2.9	2.0-6.0	.28	.28	5	3	86
		9-31	10-18	1.30-1.50	0.60-6.00	0.17-0.22	0.0-2.9	0.2-2.0	.43	.43			
		31-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Glyndon-----	2	0-11	10-20	1.05-1.25	0.60-2.00	0.20-0.23	0.0-2.9	2.0-6.0	.28	.28	5	3	86
		11-28	10-18	1.30-1.50	0.60-6.00	0.17-0.22	0.0-2.9	0.2-2.0	.28	.28			
		28-60	5-18	1.35-1.65	0.60-6.00	0.08-0.22	0.0-2.9	0.0-0.5	.28	.28			

Table 23.--Physical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Clay	Moist bulk density	Permea- bility	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind	Wind
									Kw	Kf	T	erodi- bility group	erodi- bility index
<b>I1A:</b>													
Espelie-----	1	0-9	5-18	1.20-1.45	2.00-6.00	0.13-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		9-24	3-10	1.35-1.60	2.00-20	0.06-0.11	0.0-2.9	0.5-1.0	.17	.17			
		24-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Hattie-----	1	0-8	40-60	1.10-1.30	0.06-0.20	0.13-0.17	6.0-8.9	2.0-5.0	.28	.28	5	4	86
		8-22	35-60	1.25-1.45	0.06-0.20	0.10-0.19	6.0-8.9	0.2-2.0	.28	.28			
		22-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
<b>I2A:</b>													
Augsburg-----	75	0-11	10-20	0.95-1.20	0.60-2.00	0.20-0.23	0.0-2.9	3.0-8.0	.28	.28	5	3	86
		11-18	5-18	1.30-1.50	0.60-6.00	0.17-0.22	0.0-2.9	0.2-2.0	.28	.28			
		18-33	5-18	1.40-1.60	0.60-6.00	0.17-0.22	0.0-2.9	0.1-0.5	.28	.28			
		33-60	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Borup-----	10	0-12	10-20	1.15-1.35	0.60-2.00	0.20-0.23	0.0-2.9	3.0-8.0	.28	.28	5	3	86
		12-34	10-18	1.30-1.50	0.60-6.00	0.17-0.22	0.0-2.9	0.2-2.0	.28	.28			
		34-60	5-18	1.35-1.65	0.60-20	0.08-0.22	0.0-2.9	0.0-0.5	.28	.28			
Foxlake-----	5	0-19	18-27	1.15-1.35	0.60-6.00	0.20-0.22	0.0-2.9	3.0-8.0	.24	.24	5	4L	86
		19-38	35-60	1.25-1.45	0.06-0.20	0.09-0.19	6.0-8.9	0.5-2.0	.28	.28			
		38-49	35-60	1.25-1.45	0.06-0.20	0.09-0.19	6.0-8.9	0.1-0.5	.28	.28			
		49-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Augsburg, depressional	3	0-11	10-20	1.00-1.30	0.60-2.00	0.20-0.30	0.0-2.9	3.0-15	.28	.28	5	4L	86
		11-18	5-18	1.30-1.50	0.60-6.00	0.17-0.23	0.0-2.9	0.5-2.0	.28	.28			
		18-33	5-18	1.40-1.60	0.60-6.00	0.17-0.22	0.0-2.9	0.1-0.5	.28	.28			
		33-60	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Wheatville-----	3	0-9	10-20	1.25-1.40	0.60-2.00	0.18-0.22	0.0-2.9	2.0-6.0	.28	.28	5	3	86
		9-31	10-18	1.30-1.50	0.60-6.00	0.17-0.22	0.0-2.9	0.2-2.0	.43	.43			
		31-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Glyndon-----	2	0-11	10-20	1.05-1.25	0.60-2.00	0.20-0.23	0.0-2.9	2.0-6.0	.28	.28	5	3	86
		11-28	10-18	1.30-1.50	0.60-6.00	0.17-0.22	0.0-2.9	0.2-2.0	.28	.28			
		28-60	5-18	1.35-1.65	0.60-6.00	0.08-0.22	0.0-2.9	0.0-0.5	.28	.28			
Espelie-----	1	0-9	5-18	1.20-1.45	2.00-6.00	0.13-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		9-24	3-10	1.35-1.60	2.00-20	0.06-0.11	0.0-2.9	0.5-1.0	.17	.17			
		24-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Hattie-----	1	0-8	40-60	1.10-1.30	0.06-0.20	0.13-0.17	6.0-8.9	2.0-5.0	.28	.28	5	4	86
		8-22	35-60	1.25-1.45	0.06-0.20	0.10-0.19	6.0-8.9	0.2-2.0	.28	.28			
		22-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			

Table 23.--Physical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Clay	Moist bulk density	Permea- bility	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
		In	Pct	g/cc	In/hr	In/in	Pct	Pct					
<b>I3A:</b>													
Berner-----	80	0-28	0-0	0.10-0.35	0.20-6.00	0.35-0.48	---	75-95	.02	.02	2	2	134
		28-31	5-15	1.25-1.45	2.00-6.00	0.10-0.18	0.0-2.9	2.0-10	.17	.24			
		31-44	0-5	1.45-1.65	6.00-20	0.05-0.10	0.0-2.9	0.1-0.5	.05	.15			
		44-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Northwood-----	7	0-9	0-0	0.10-0.40	0.20-6.00	0.35-0.48	---	50-95	.02	.02	4	2	134
		9-14	5-15	1.25-1.45	2.00-20	0.10-0.18	0.0-2.9	2.0-10	.15	.15			
		14-24	2-8	1.45-1.70	6.00-20	0.06-0.11	0.0-2.9	0.1-0.5	.15	.15			
		24-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Kratka-----	5	0-11	5-18	1.20-1.50	2.00-6.00	0.16-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		11-18	2-10	1.30-1.60	6.00-20	0.06-0.11	0.0-2.9	0.5-2.0	.17	.17			
		18-25	2-8	1.30-1.60	6.00-20	0.06-0.12	0.0-2.9	0.1-0.5	.17	.17			
		25-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Hamre-----	3	0-13	0-0	0.10-0.40	0.20-6.00	0.35-0.48	---	50-95	.02	.02	5	2	134
		13-18	18-35	1.25-1.50	0.20-2.00	0.17-0.22	3.0-5.9	2.0-10	.32	.32			
		18-71	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
		71-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Strathcona-----	3	0-10	5-18	1.20-1.50	2.00-20	0.13-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		10-17	10-18	1.30-1.50	2.00-6.00	0.09-0.17	0.0-2.9	0.5-2.0	.24	.24			
		17-28	2-8	1.35-1.60	6.00-20	0.05-0.12	0.0-2.9	0.1-0.5	.15	.15			
		28-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Seelyeville-----	2	0-10	0-0	0.10-0.25	0.20-6.00	0.35-0.48	---	75-99	.02	.02	3	2	134
		10-80	0-0	0.10-0.25	0.20-6.00	0.35-0.48	---	75-99	.02	.02			
<b>I4A:</b>													
Berner-----	30	0-28	0-0	0.10-0.35	0.20-6.00	0.35-0.48	---	75-95	.02	.02	2	2	134
		28-31	5-15	1.25-1.45	2.00-6.00	0.10-0.18	0.0-2.9	2.0-10	.17	.24			
		31-44	0-5	1.45-1.65	6.00-20	0.05-0.10	0.0-2.9	0.1-0.5	.05	.15			
		44-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Rosewood, depressional	30	0-8	5-18	1.00-1.35	2.00-6.00	0.20-0.30	0.0-2.9	3.0-15	.20	.20	3	3	86
		8-18	6-18	1.30-1.50	2.00-6.00	0.09-0.17	0.0-2.9	0.5-2.0	.24	.24			
		18-80	2-8	1.45-1.65	6.00-20	0.05-0.08	0.0-2.9	0.0-0.5	.15	.15			
Strathcona, depressional-----	30	0-10	5-18	1.20-1.50	2.00-20	0.20-0.30	0.0-2.9	3.0-15	.20	.20	3	3	86
		10-17	10-18	1.30-1.50	2.00-6.00	0.09-0.17	0.0-2.9	0.5-2.0	.24	.24			
		17-28	2-8	1.35-1.60	6.00-20	0.05-0.12	0.0-2.9	0.1-0.5	.15	.15			
		28-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			

Table 23.--Physical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Clay	Moist bulk density	Permeability	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind	Wind	
									Kw	Kf	T	erodi- bility group	erodi- bility index	
		In	Pct	g/cc	In/hr	In/in	Pct	Pct						
<b>I4A:</b>														
Rosewood-----	4	0-8	5-18	1.00-1.35	2.00-6.00	0.16-0.18	0.0-2.9	3.0-8.0	.24	.24	3	3	86	
		8-18	6-18	1.30-1.50	2.00-6.00	0.09-0.17	0.0-2.9	0.5-2.0	.24	.24				
		18-80	2-8	1.45-1.65	6.00-20	0.05-0.08	0.0-2.9	0.0-0.5	.15	.15				
Deerwood-----	2	0-10	0-0	0.15-0.35	0.20-6.00	0.35-0.48	---	50-95	.02	.02	3	2	134	
		10-12	2-15	1.25-1.45	2.00-20	0.09-0.17	0.0-2.9	2.0-10	.17	.17				
		12-60	1-8	1.50-1.70	6.00-20	0.02-0.10	0.0-2.9	0.0-0.5	.15	.17				
Mavie-----	2	0-12	10-18	1.20-1.50	2.00-6.00	0.16-0.18	0.0-2.9	3.0-8.0	.20	.20	3	3	86	
		12-18	10-25	1.35-1.55	0.60-2.00	0.12-0.19	0.0-2.9	0.5-2.0	.28	.28				
		18-39	1-10	1.40-1.65	6.00-20	0.03-0.06	0.0-2.9	0.0-0.5	.10	.15				
		39-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37				
Strathcona-----	2	0-10	5-18	1.20-1.50	2.00-20	0.13-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86	
		10-17	10-18	1.30-1.50	2.00-6.00	0.09-0.17	0.0-2.9	0.5-2.0	.24	.24				
		17-28	2-8	1.35-1.60	6.00-20	0.05-0.12	0.0-2.9	0.1-0.5	.15	.15				
		28-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37				
<b>I5A:</b>														
Borup-----	75	0-12	15-22	0.95-1.20	0.60-2.00	0.20-0.23	0.0-2.9	3.0-8.0	.28	.28	5	4L	86	
		12-34	10-18	1.30-1.50	0.60-6.00	0.17-0.22	0.0-2.9	0.2-2.0	.28	.28				
		34-60	5-18	1.35-1.65	0.60-6.00	0.08-0.22	0.0-2.9	0.0-0.5	.28	.28				
Glyndon-----	9	0-11	10-20	1.05-1.25	0.60-2.00	0.20-0.23	0.0-2.9	2.0-6.0	.28	.28	5	3	86	
		11-28	10-18	1.30-1.50	0.60-6.00	0.17-0.22	0.0-2.9	0.2-2.0	.28	.28				
		28-60	5-18	1.35-1.65	0.60-6.00	0.08-0.22	0.0-2.9	0.0-0.5	.28	.28				
Rosewood-----	8	0-8	5-18	1.00-1.35	2.00-6.00	0.16-0.18	0.0-2.9	3.0-8.0	.24	.24	3	3	86	
		8-18	6-18	1.30-1.50	2.00-6.00	0.09-0.17	0.0-2.9	0.5-2.0	.24	.24				
		18-80	2-8	1.45-1.65	6.00-20	0.05-0.08	0.0-2.9	0.0-0.5	.15	.15				
Augsburg-----	5	0-11	15-22	0.95-1.20	0.60-2.00	0.20-0.23	0.0-2.9	3.0-8.0	.28	.28	5	4L	86	
		11-18	5-18	1.30-1.50	0.60-6.00	0.17-0.22	0.0-2.9	0.2-2.0	.28	.28				
		18-33	5-18	1.40-1.60	0.60-6.00	0.17-0.22	0.0-2.9	0.1-0.5	.28	.28				
		33-60	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28				
Augsburg, depressional	3	0-11	10-20	1.00-1.30	0.60-2.00	0.20-0.30	0.0-2.9	3.0-15	.28	.28	5	4L	86	
		11-18	5-18	1.30-1.50	0.60-6.00	0.17-0.23	0.0-2.9	0.5-2.0	.28	.28				
		18-33	5-18	1.40-1.60	0.60-6.00	0.17-0.22	0.0-2.9	0.1-0.5	.28	.28				
		33-60	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28				

Table 23.--Physical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Clay	Moist bulk density	Permea- bility	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
		In	Pct	g/cc	In/hr	In/in	Pct	Pct					
<b>I6A:</b>													
Borup-----	75	0-12	10-20	1.15-1.35	0.60-2.00	0.20-0.23	0.0-2.9	3.0-8.0	.28	.28	5	3	86
		12-34	10-18	1.30-1.50	0.60-6.00	0.17-0.22	0.0-2.9	0.2-2.0	.28	.28			
		34-60	5-18	1.35-1.65	0.60-6.00	0.08-0.22	0.0-2.9	0.0-0.5	.28	.28			
Glyndon-----	9	0-11	10-20	1.05-1.25	0.60-2.00	0.20-0.23	0.0-2.9	2.0-6.0	.28	.28	5	3	86
		11-28	10-18	1.30-1.50	0.60-6.00	0.17-0.22	0.0-2.9	0.2-2.0	.28	.28			
		28-60	5-18	1.35-1.65	0.60-6.00	0.08-0.22	0.0-2.9	0.0-0.5	.28	.28			
Rosewood-----	8	0-8	5-18	1.00-1.35	2.00-6.00	0.16-0.18	0.0-2.9	3.0-8.0	.24	.24	3	3	86
		8-18	6-18	1.30-1.50	2.00-6.00	0.09-0.17	0.0-2.9	0.5-2.0	.24	.24			
		18-80	2-8	1.45-1.65	6.00-20	0.05-0.08	0.0-2.9	0.0-0.5	.15	.15			
Augsburg-----	5	0-11	15-22	0.95-1.20	0.60-2.00	0.20-0.23	0.0-2.9	3.0-8.0	.28	.28	5	4L	86
		11-18	5-18	1.30-1.50	0.60-6.00	0.17-0.22	0.0-2.9	0.2-2.0	.28	.28			
		18-33	5-18	1.40-1.60	0.60-6.00	0.17-0.22	0.0-2.9	0.1-0.5	.28	.28			
		33-60	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Augsburg, depressional	3	0-11	10-20	1.00-1.30	0.60-2.00	0.20-0.30	0.0-2.9	3.0-15	.28	.28	5	4L	86
		11-18	5-18	1.30-1.50	0.60-6.00	0.17-0.23	0.0-2.9	0.5-2.0	.28	.28			
		18-33	5-18	1.40-1.60	0.60-6.00	0.17-0.22	0.0-2.9	0.1-0.5	.28	.28			
		33-60	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
<b>I7A:</b>													
Bowstring-----	45	0-38	0-0	0.15-0.35	0.20-6.00	0.35-0.45	---	40-90	.02	.02	2	8	0
		38-47	1-12	1.40-1.60	0.60-20	0.08-0.14	0.0-2.9	2.0-10	.17	.20			
		47-80	0-0	0.15-0.35	0.20-6.00	0.35-0.45	---	40-90	.02	.02			
Fluvaquents-----	45	0-16	5-15	1.20-1.50	2.00-20	0.16-0.24	0.0-2.9	3.0-10	.20	.20	5	5	56
		16-80	1-27	1.40-1.65	0.60-20	0.04-0.20	0.0-2.9	0.5-3.0	.17	.20			
Hapludolls-----	5	0-9	15-27	1.00-1.30	0.60-2.00	0.17-0.22	3.0-5.9	1.0-5.0	.28	.28	5	6	48
		9-60	15-35	1.20-1.50	0.60-2.00	0.14-0.20	0.0-2.9	0.0-0.5	.28	.28			
Water-----	5	---	---	---	---	---	---	---	---	---	-	---	---
<b>I8A:</b>													
Cathro-----	80	0-11	0-0	0.10-0.35	0.20-6.00	0.35-0.48	---	75-95	.02	.02	2	2	134
		11-23	0-0	0.10-0.35	0.20-6.00	0.35-0.48	---	85-95	.02	.02			
		23-60	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-1.0	.37	.37			
Hamre-----	8	0-13	0-0	0.10-0.40	0.20-6.00	0.35-0.48	---	50-95	.02	.02	5	2	134
		13-18	18-35	1.25-1.50	0.20-2.00	0.17-0.22	3.0-5.9	2.0-10	.32	.32			
		18-71	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
		71-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			

Table 23.--Physical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Clay	Moist bulk density	Permea- bility	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
		In	Pct	g/cc	In/hr	In/in	Pct	Pct					
<b>I8A:</b>													
Northwood-----	3	0-9	0-0	0.10-0.40	0.20-6.00	0.35-0.48	---	50-95	.02	.02	4	2	134
		9-14	5-15	1.25-1.45	2.00-20	0.10-0.18	0.0-2.9	2.0-10	.15	.15			
		14-24	2-8	1.45-1.70	6.00-20	0.06-0.11	0.0-2.9	0.1-0.5	.15	.15			
		24-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Roliss-----	3	0-14	18-27	1.10-1.50	0.20-2.00	0.17-0.24	3.0-5.9	3.0-8.0	.24	.24	5	4L	86
		14-20	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.5-2.0	.37	.37			
		20-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Berner-----	2	0-28	0-0	0.10-0.35	0.20-6.00	0.35-0.48	---	75-95	.02	.02	2	2	134
		28-31	5-15	1.25-1.45	2.00-6.00	0.10-0.18	0.0-2.9	2.0-10	.17	.24			
		31-44	0-5	1.45-1.65	6.00-20	0.05-0.10	0.0-2.9	0.1-0.5	.05	.15			
		44-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Kratka-----	2	0-11	5-18	1.20-1.50	2.00-6.00	0.16-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		11-18	2-10	1.30-1.60	6.00-20	0.06-0.11	0.0-2.9	0.5-2.0	.17	.17			
		18-25	2-8	1.30-1.60	6.00-20	0.06-0.12	0.0-2.9	0.1-0.5	.17	.17			
		25-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Seelyeville-----	2	0-10	0-0	0.10-0.25	0.20-6.00	0.35-0.48	---	75-99	.02	.02	3	2	134
		10-80	0-0	0.10-0.25	0.20-6.00	0.35-0.48	---	75-99	.02	.02			
<b>I9A:</b>													
Clearwater-----	80	0-8	40-60	1.10-1.30	0.06-0.20	0.13-0.17	6.0-8.9	3.0-8.0	.28	.28	5	4	86
		8-35	35-60	1.20-1.50	0.06-0.20	0.10-0.19	6.0-8.9	0.5-2.0	.32	.32			
		35-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Clearwater, very cobble-----	5	0-8	40-60	1.10-1.30	0.06-0.20	0.13-0.17	6.0-8.9	3.0-8.0	.24	.28	5	4	86
		8-35	35-60	1.20-1.50	0.06-0.20	0.10-0.19	6.0-8.9	0.5-2.0	.32	.32			
		35-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Reis-----	5	0-9	40-60	1.10-1.30	0.06-0.20	0.13-0.17	6.0-8.9	3.0-8.0	.28	.28	5	4	86
		9-17	40-60	1.20-1.50	0.06-0.20	0.13-0.17	6.0-8.9	0.5-8.0	.32	.32			
		17-33	40-60	1.20-1.50	0.06-0.20	0.13-0.17	6.0-8.9	0.5-2.0	.32	.32			
		33-42	40-60	1.30-1.60	0.06-0.20	0.10-0.16	6.0-8.9	0.2-1.0	.32	.32			
		42-60	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
		60-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Clearwater, depressional-----	3	0-8	27-35	1.20-1.45	0.20-2.00	0.17-0.30	3.0-5.9	3.0-15	.24	.24	5	6	48
		8-35	35-60	1.20-1.50	0.06-0.20	0.10-0.19	6.0-8.9	1.0-3.0	.32	.32			
		35-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			

Table 23.--Physical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Clay	Moist bulk density	Permeability	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
									Kw	Kf	T		
		In	Pct	g/cc	In/hr	In/in	Pct	Pct					
<b>I9A:</b>													
Espelie-----	3	0-9	5-18	1.20-1.45	2.00-6.00	0.13-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		9-24	3-10	1.35-1.60	2.00-20	0.06-0.11	0.0-2.9	0.5-1.0	.17	.17			
		24-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Foxlake-----	2	0-19	18-27	1.15-1.35	0.60-6.00	0.20-0.22	0.0-2.9	3.0-8.0	.24	.24	5	4L	56
		19-38	35-60	1.25-1.45	0.06-0.20	0.09-0.19	6.0-8.9	0.5-2.0	.28	.28			
		38-49	35-60	1.25-1.45	0.06-0.20	0.09-0.19	6.0-8.9	0.1-0.5	.28	.28			
		49-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Hattie-----	1	0-8	40-60	1.10-1.30	0.06-0.20	0.13-0.17	6.0-8.9	2.0-5.0	.28	.28	5	4	86
		8-22	35-60	1.25-1.45	0.06-0.20	0.10-0.19	6.0-8.9	0.2-2.0	.28	.28			
		22-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Huot-----	1	0-14	5-15	1.15-1.45	2.00-6.00	0.13-0.18	0.0-2.9	2.0-5.0	.20	.20	5	3	86
		14-26	5-15	1.30-1.60	2.00-6.00	0.09-0.17	0.0-2.9	0.2-1.0	.20	.20			
		26-34	2-8	1.55-1.70	6.00-20	0.06-0.11	0.0-2.9	0.1-0.5	.20	.20			
		34-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
<b>I10A:</b>													
Clearwater, depressional-----	85	0-8	27-35	1.20-1.45	0.20-2.00	0.17-0.30	3.0-5.9	3.0-15	.24	.24	5	6	48
		8-35	35-60	1.20-1.50	0.06-0.20	0.10-0.19	6.0-8.9	1.0-3.0	.32	.32			
		35-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Clearwater-----	9	0-8	40-60	1.10-1.30	0.06-0.20	0.13-0.17	6.0-8.9	3.0-8.0	.28	.28	5	4	86
		8-35	35-60	1.20-1.50	0.06-0.20	0.10-0.19	6.0-8.9	0.5-2.0	.32	.32			
		35-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Augsburg, depressional	3	0-11	10-20	1.00-1.30	0.60-2.00	0.20-0.30	0.0-2.9	3.0-15	.28	.28	5	4L	86
		11-18	5-18	1.30-1.50	0.60-6.00	0.17-0.23	0.0-2.9	0.5-2.0	.28	.28			
		18-33	5-18	1.40-1.60	0.60-6.00	0.17-0.22	0.0-2.9	0.1-0.5	.28	.28			
		33-60	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Reis-----	2	0-9	40-60	1.10-1.30	0.06-0.20	0.13-0.17	6.0-8.9	3.0-8.0	.28	.28	5	4	86
		9-17	40-60	1.20-1.50	0.06-0.20	0.13-0.17	6.0-8.9	0.5-8.0	.32	.32			
		17-33	40-60	1.20-1.50	0.06-0.20	0.13-0.17	6.0-8.9	0.5-2.0	.32	.32			
		33-42	40-60	1.30-1.60	0.06-0.20	0.10-0.16	6.0-8.9	0.2-1.0	.32	.32			
		42-60	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
		60-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Espelie-----	1	0-9	5-18	1.20-1.45	2.00-6.00	0.13-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		9-24	3-10	1.35-1.60	2.00-20	0.06-0.11	0.0-2.9	0.5-1.0	.17	.17			
		24-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			

Table 23.--Physical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Clay	Moist bulk density	Permea- bility	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
		In	Pct	g/cc	In/hr	In/in	Pct	Pct					
<b>I11A:</b>													
Deerwood-----	85	0-10	0-0	0.15-0.35	0.20-6.00	0.35-0.48	---	50-95	.02	.02	3	2	134
		10-12	2-15	1.25-1.45	2.00-20	0.09-0.17	0.0-2.9	2.0-10	.17	.17			
		12-60	1-8	1.50-1.70	6.00-20	0.02-0.10	0.0-2.9	0.0-0.5	.15	.17			
Rosewood-----	6	0-8	5-18	1.00-1.35	2.00-6.00	0.16-0.18	0.0-2.9	3.0-8.0	.24	.24	3	3	86
		8-18	6-18	1.30-1.50	2.00-6.00	0.09-0.17	0.0-2.9	0.5-2.0	.24	.24			
		18-80	2-8	1.45-1.65	6.00-20	0.05-0.08	0.0-2.9	0.0-0.5	.15	.15			
Markey-----	3	0-32	0-0	0.10-0.35	0.20-6.00	0.35-0.48	---	75-95	.02	.02	2	2	134
		32-60	2-8	1.40-1.65	6.00-20	0.03-0.10	0.0-2.9	0.0-0.5	.15	.15			
Strathcona-----	2	0-10	5-18	1.20-1.50	2.00-20	0.13-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		10-17	10-18	1.30-1.50	2.00-6.00	0.09-0.17	0.0-2.9	0.5-2.0	.24	.24			
		17-28	2-8	1.35-1.60	6.00-20	0.05-0.12	0.0-2.9	0.1-0.5	.15	.15			
		28-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Syrene-----	2	0-9	8-18	1.10-1.40	0.60-2.00	0.13-0.15	0.0-2.9	3.0-8.0	.20	.20	3	3	86
		9-17	10-25	1.30-1.50	2.00-6.00	0.12-0.19	0.0-2.9	0.5-2.0	.32	.32			
		17-27	1-5	1.50-1.70	6.00-20	0.02-0.04	0.0-2.9	0.0-0.5	.05	.10			
		27-60	1-5	1.50-1.70	6.00-20	0.02-0.04	0.0-2.9	0.0-0.5	.05	.10			
Venlo-----	2	0-13	5-10	1.20-1.30	6.00-20	0.13-0.18	0.0-2.9	3.0-15	.20	.20	5	3	86
		13-60	1-8	1.45-1.65	2.00-20	0.06-0.10	0.0-2.9	0.0-0.5	.17	.17			
<b>I12A:</b>													
Eckvoll-----	70	0-9	2-10	1.20-1.40	6.00-20	0.10-0.12	0.0-2.9	0.5-3.0	.17	.17	5	2	134
		9-25	1-10	1.35-1.55	6.00-20	0.05-0.12	0.0-2.9	0.1-1.0	.15	.15			
		25-32	18-35	1.40-1.70	0.20-2.00	0.16-0.18	3.0-5.9	0.1-1.0	.37	.37			
		32-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Kratka-----	8	0-11	5-18	1.20-1.50	2.00-6.00	0.16-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		11-18	2-10	1.30-1.60	6.00-20	0.06-0.11	0.0-2.9	0.5-2.0	.17	.17			
		18-25	2-8	1.30-1.60	6.00-20	0.06-0.12	0.0-2.9	0.1-0.5	.17	.17			
		25-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Smiley-----	7	0-12	18-27	1.20-1.50	0.60-2.00	0.20-0.24	0.0-2.9	3.0-8.0	.24	.24	5	5	56
		12-19	18-35	1.35-1.65	0.60-2.00	0.15-0.19	3.0-5.9	0.5-2.0	.24	.24			
		19-42	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.2-1.0	.37	.37			
		42-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			

Table 23.--Physical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Clay	Moist bulk density	Permea- bility	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
		In	Pct	g/cc	In/hr	In/in	Pct	Pct					
I12A:													
Linveldt-----	5	0-9	5-15	1.15-1.45	2.00-6.00	0.14-0.18	0.0-2.9	2.0-5.0	.20	.20	5	3	86
		9-16	12-25	1.25-1.50	0.60-6.00	0.12-0.18	0.0-2.9	0.2-2.0	.28	.28			
		16-29	1-8	1.45-1.65	6.00-20	0.05-0.11	0.0-2.9	0.1-0.5	.15	.17			
		29-45	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.2-1.0	.37	.37			
		45-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Reiner-----	5	0-7	5-15	1.10-1.35	2.00-6.00	0.16-0.18	0.0-2.9	2.0-5.0	.20	.20	5	3	86
		7-17	25-35	1.40-1.65	0.60-2.00	0.15-0.19	3.0-5.9	0.2-2.0	.32	.32			
		17-35	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.2-1.0	.37	.37			
		35-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Foldahl-----	2	0-12	2-10	1.20-1.40	6.00-20	0.10-0.14	0.0-2.9	2.0-4.0	.17	.17	5	2	134
		12-30	1-10	1.45-1.60	6.00-20	0.07-0.12	0.0-2.9	0.2-1.0	.17	.17			
		30-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Pelan-----	2	0-6	5-15	1.10-1.35	2.00-6.00	0.13-0.15	0.0-2.9	1.0-3.0	.20	.24	5	3	86
		6-9	1-10	1.35-1.55	6.00-20	0.05-0.12	0.0-2.9	0.2-1.0	.15	.15			
		9-14	15-25	1.45-1.65	6.00-20	0.03-0.11	0.0-2.9	0.2-1.0	.20	.24			
		14-20	1-5	1.50-1.70	6.00-20	0.02-0.07	0.0-2.9	0.0-0.5	.05	.15			
		20-60	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Poppleton-----	1	0-6	2-10	1.20-1.40	6.00-20	0.08-0.10	0.0-2.9	0.5-2.0	.15	.15	5	1	250
		6-9	1-8	1.35-1.55	6.00-20	0.05-0.12	0.0-2.9	0.1-0.5	.15	.15			
		9-40	1-8	1.35-1.55	6.00-20	0.05-0.12	0.0-2.9	0.1-0.5	.15	.15			
		40-60	1-8	1.45-1.65	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.15	.15			
I13A:													
Espelie-----	75	0-9	5-18	1.20-1.45	2.00-6.00	0.13-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		9-24	3-10	1.35-1.60	2.00-20	0.06-0.11	0.0-2.9	0.5-1.0	.17	.17			
		24-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Foxlake-----	8	0-19	18-27	1.15-1.35	0.60-6.00	0.20-0.22	0.0-2.9	3.0-8.0	.24	.24	5	4L	56
		19-38	35-60	1.25-1.45	0.06-0.20	0.09-0.19	6.0-8.9	0.5-2.0	.28	.28			
		38-49	35-60	1.25-1.45	0.06-0.20	0.09-0.19	6.0-8.9	0.1-0.5	.28	.28			
		49-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Hilaire-----	7	0-10	5-15	1.15-1.45	2.00-6.00	0.10-0.12	0.0-2.9	2.0-5.0	.20	.20	5	2	134
		10-34	1-8	1.35-1.60	6.00-20	0.07-0.11	0.0-2.9	0.5-1.0	.15	.15			
		34-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Clearwater, depressional-----	5	0-8	27-35	1.20-1.45	0.20-2.00	0.17-0.30	3.0-5.9	3.0-15	.24	.24	5	6	48
		8-35	35-60	1.20-1.50	0.06-0.20	0.10-0.19	6.0-8.9	1.0-3.0	.32	.32			
		35-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			

Table 23.--Physical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Clay	Moist bulk density	Permea- bility	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
I13A:		In	Pct	g/cc	In/hr	In/in	Pct	Pct					
Thiefriever-----	5	0-12	8-18	1.20-1.45	2.00-6.00	0.13-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		12-23	10-18	1.30-1.50	2.00-6.00	0.09-0.17	0.0-2.9	0.5-2.0	.24	.24			
		23-32	2-8	1.45-1.70	6.00-20	0.06-0.11	0.0-2.9	0.1-0.5	.17	.17			
		32-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
I14B:													
Fairdale-----	85	0-7	18-27	1.00-1.35	0.60-2.00	0.20-0.24	0.0-2.9	2.0-7.0	.28	.28	5	4L	86
		7-48	15-35	1.20-1.50	0.60-2.00	0.17-0.23	3.0-5.9	0.5-3.0	.32	.32			
		48-67	15-30	1.00-1.30	0.60-2.00	0.18-0.24	0.0-2.9	3.0-6.0	.24	.24			
		67-80	15-35	1.30-1.60	0.60-2.00	0.17-0.23	3.0-5.9	0.1-3.0	.32	.32			
Fluvaquents-----	6	0-16	5-15	1.20-1.50	2.00-20	0.16-0.24	0.0-2.9	3.0-10	.20	.20	5	5	56
		16-80	1-27	1.40-1.65	0.60-20	0.04-0.20	0.0-2.9	0.5-3.0	.17	.20			
Hapludolls-----	5	0-9	15-27	1.00-1.30	0.60-2.00	0.17-0.22	3.0-5.9	1.0-5.0	.28	.28	5	6	48
		9-60	15-35	1.20-1.50	0.60-2.00	0.14-0.20	0.0-2.9	0.0-0.5	.28	.28			
Hapludalfs-----	2	0-6	10-18	1.30-1.45	2.00-6.00	0.16-0.18	0.0-2.9	0.5-2.0	.20	.20	5	3	86
		6-8	5-15	1.30-1.55	2.00-20	0.10-0.18	0.0-2.9	0.0-0.5	.20	.20			
		8-25	18-35	1.25-1.65	0.20-2.00	0.15-0.19	3.0-5.9	0.0-0.5	.37	.37			
		25-80	10-27	1.30-1.60	0.60-6.00	0.14-0.19	0.0-2.9	0.0-0.5	.32	.32			
Zell-----	2	0-6	10-18	1.05-1.25	0.60-2.00	0.19-0.22	0.0-2.9	2.0-5.0	.32	.32	5	4L	86
		6-26	10-18	1.30-1.50	0.60-6.00	0.17-0.22	0.0-2.9	0.0-1.0	.43	.43			
		26-60	5-18	1.35-1.65	0.60-6.00	0.08-0.22	0.0-2.9	0.0-0.5	.43	.43			
I14D:													
Fairdale-----	85	0-7	18-27	1.00-1.35	0.60-2.00	0.20-0.24	0.0-2.9	2.0-7.0	.28	.28	5	4L	86
		7-48	15-35	1.20-1.50	0.60-2.00	0.17-0.23	3.0-5.9	0.5-3.0	.32	.32			
		48-67	15-30	1.00-1.30	0.60-2.00	0.18-0.24	0.0-2.9	3.0-6.0	.24	.24			
		67-80	15-35	1.30-1.60	0.60-2.00	0.17-0.23	3.0-5.9	0.1-3.0	.32	.32			
Fluvaquents-----	6	0-16	5-15	1.20-1.50	2.00-20	0.16-0.24	0.0-2.9	3.0-10	.20	.20	5	5	56
		16-80	1-27	1.40-1.65	0.60-20	0.04-0.20	0.0-2.9	0.5-3.0	.17	.20			
Hapludolls-----	4	0-9	15-27	1.00-1.30	0.60-2.00	0.17-0.22	3.0-5.9	1.0-5.0	.28	.28	5	6	48
		9-60	15-35	1.20-1.50	0.60-2.00	0.14-0.20	0.0-2.9	0.0-0.5	.28	.28			
Zell-----	3	0-6	10-18	1.05-1.25	0.60-2.00	0.19-0.22	0.0-2.9	2.0-5.0	.32	.32	5	4L	86
		6-26	10-18	1.30-1.50	0.60-6.00	0.17-0.22	0.0-2.9	0.0-1.0	.43	.43			
		26-60	5-18	1.35-1.65	0.60-6.00	0.08-0.22	0.0-2.9	0.0-0.5	.43	.43			

Table 23.--Physical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth In	Clay Pct	Moist bulk density g/cc	Permea- bility In/hr	Available water capacity In/in	Linear extensi- bility Pct	Organic matter Pct	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
I14D: Hapludalfs-----	2	0-6	10-18	1.30-1.45	2.00-6.00	0.16-0.18	0.0-2.9	0.5-2.0	.20	.20	5	3	86
		6-8	5-15	1.30-1.55	2.00-20	0.10-0.18	0.0-2.9	0.0-0.5	.20	.20			
		8-25	18-35	1.25-1.65	0.20-2.00	0.15-0.19	3.0-5.9	0.0-0.5	.37	.37			
		25-80	10-27	1.30-1.60	0.60-6.00	0.14-0.19	0.0-2.9	0.0-0.5	.32	.32			
I15A: Flaming-----	70	0-12	2-10	1.20-1.40	6.00-20	0.10-0.12	0.0-2.9	2.0-4.0	.17	.17	5	2	134
		12-17	2-10	1.30-1.50	6.00-20	0.06-0.12	0.0-2.9	0.5-3.0	.17	.17			
		17-27	2-8	1.30-1.50	6.00-20	0.05-0.12	0.0-2.9	0.2-1.0	.17	.17			
		27-60	1-8	1.50-1.70	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.17	.17			
Garborg-----	10	0-12	2-10	1.20-1.40	6.00-20	0.10-0.13	0.0-2.9	2.0-6.0	.17	.17	5	2	134
		12-41	2-10	1.35-1.55	2.00-20	0.06-0.12	0.0-2.9	0.5-2.0	.17	.17			
		41-59	1-8	1.45-1.65	2.00-20	0.06-0.10	0.0-2.9	0.0-0.5	.17	.17			
		59-80	1-8	1.45-1.65	2.00-20	0.06-0.10	0.0-2.9	0.0-0.5	.17	.17			
Hamar-----	5	0-12	2-10	1.20-1.40	2.00-20	0.10-0.13	0.0-2.9	3.0-8.0	.17	.17	5	2	134
		12-17	2-10	1.35-1.55	2.00-20	0.06-0.12	0.0-2.9	0.5-2.0	.17	.17			
		17-40	1-8	1.45-1.65	2.00-20	0.06-0.10	0.0-2.9	0.0-0.5	.17	.17			
		40-47	2-10	1.30-1.50	2.00-20	0.10-0.13	0.0-2.9	1.0-4.0	.17	.17			
		47-60	1-8	1.45-1.65	2.00-20	0.06-0.10	0.0-2.9	0.0-0.5	.17	.17			
Ulen-----	5	0-9	8-18	1.15-1.45	2.00-6.00	0.13-0.18	0.0-2.9	2.0-5.0	.20	.20	3	3	86
		9-42	5-15	1.30-1.60	2.00-6.00	0.09-0.17	0.0-2.9	0.2-1.0	.24	.24			
		42-60	2-8	1.45-1.65	6.00-20	0.05-0.08	0.0-2.9	0.0-0.5	.15	.15			
Poppleton-----	3	0-6	2-10	1.20-1.40	6.00-20	0.08-0.10	0.0-2.9	0.5-2.0	.15	.15	5	1	250
		6-9	1-8	1.35-1.55	6.00-20	0.05-0.12	0.0-2.9	0.1-0.5	.15	.15			
		9-40	1-8	1.35-1.55	6.00-20	0.05-0.12	0.0-2.9	0.1-0.5	.15	.15			
		40-60	1-8	1.45-1.65	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.15	.15			
Sandberg-----	3	0-12	2-10	1.20-1.40	6.00-20	0.10-0.12	0.0-2.9	1.0-3.0	.17	.17	5	2	134
		12-19	1-5	1.50-1.70	6.00-20	0.03-0.10	0.0-2.9	0.5-1.0	.05	.10			
		19-29	1-5	1.50-1.70	20-40	0.02-0.06	0.0-2.9	0.5-1.0	.05	.10			
		29-80	1-5	1.50-1.70	20-40	0.02-0.04	0.0-2.9	0.0-0.5	.05	.10			
Foldahl-----	2	0-12	2-10	1.20-1.40	6.00-20	0.10-0.14	0.0-2.9	2.0-4.0	.17	.17	5	2	134
		12-30	1-10	1.45-1.60	6.00-20	0.07-0.12	0.0-2.9	0.2-1.0	.17	.17			
		30-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Radium-----	2	0-14	2-8	1.20-1.40	6.00-20	0.06-0.12	0.0-2.9	1.0-3.0	.17	.17	5	2	134
		14-33	1-8	1.40-1.65	6.00-20	0.03-0.08	0.0-2.9	0.0-0.5	.10	.10			
		33-43	1-5	1.55-1.75	20-40	0.02-0.05	0.0-2.9	0.0-0.5	.10	.17			
		43-80	1-5	1.55-1.75	6.00-20	0.03-0.09	0.0-2.9	0.0-0.5	.10	.17			

Table 23.--Physical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Clay	Moist bulk density	Permea- bility	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
I16F:		In	Pct	g/cc	In/hr	In/in	Pct	Pct					
Fluvaquents-----	55	0-16 16-80	5-15 1-27	1.20-1.50 1.40-1.65	2.00-2.0 0.60-2.0	0.16-0.24 0.04-0.20	0.0-2.9 0.0-2.9	3.0-10 0.5-3.0	.20 .17	.20 .20	5	5	56
Hapludolls-----	25	0-9 9-60	15-27 15-35	1.00-1.30 1.20-1.50	0.60-2.00 0.60-2.00	0.17-0.22 0.14-0.20	3.0-5.9 0.0-2.9	1.0-5.0 0.0-0.5	.28 .28	.28 .28	5	6	48
Hapludalfs-----	7	0-6 6-8 8-25 25-80	10-18 5-15 18-35 10-27	1.30-1.45 1.30-1.55 1.25-1.65 1.30-1.60	2.00-6.00 2.00-2.0 0.20-2.00 0.60-6.00	0.16-0.18 0.10-0.18 0.15-0.19 0.14-0.19	0.0-2.9 0.0-2.9 3.0-5.9 0.0-2.9	0.5-2.0 0.0-0.5 0.0-0.5 0.0-0.5	.20 .20 .37 .32	.20 .20 .37 .32	5	3	86
Fairdale-----	5	0-7 7-48 48-67 67-80	18-27 15-35 15-30 15-35	1.00-1.35 1.20-1.50 1.00-1.30 1.30-1.60	0.60-2.00 0.60-2.00 0.60-2.00 0.60-2.00	0.20-0.24 0.17-0.23 0.18-0.24 0.17-0.23	0.0-2.9 3.0-5.9 0.0-2.9 3.0-5.9	2.0-7.0 0.5-3.0 3.0-6.0 0.1-3.0	.28 .32 .24 .32	.28 .32 .24 .32	5	4L	86
Water-----	5	---	---	---	---	---	---	---	---	---	-	---	---
Bowstring-----	2	0-38 38-47 47-80	0-0 1-12 0-0	0.15-0.35 1.40-1.60 0.15-0.35	0.20-6.00 0.60-2.0 0.20-6.00	0.35-0.45 0.08-0.14 0.35-0.45	--- 0.0-2.9 ---	40-90 2.0-10 40-90	.02 .17 .02	.02 .20 .02	2	8	0
Rauville-----	1	0-27 27-45 45-60	27-35 20-35 1-30	1.00-1.25 1.10-1.30 1.20-1.65	0.20-2.00 0.20-2.00 0.60-2.0	0.18-0.25 0.17-0.22 0.04-0.20	3.0-5.9 3.0-5.9 0.0-2.9	4.0-15 1.0-4.0 0.1-2.0	.28 .28 .17	.28 .28 .20	5	4L	86
I17A:													
Foldahl-----	75	0-12 12-30 30-80	5-15 1-10 18-30	1.15-1.45 1.45-1.60 1.35-1.55	2.00-6.00 6.00-2.0 0.60-2.00	0.14-0.18 0.07-0.12 0.15-0.19	0.0-2.9 0.0-2.9 1.0-4.2	2.0-5.0 0.2-1.0 0.0-0.5	.20 .17 .37	.20 .17 .37	5	3	86
Kratka-----	10	0-11 11-18 18-25 25-80	5-18 2-10 2-8 18-30	1.20-1.50 1.30-1.60 1.30-1.60 1.35-1.55	2.00-6.00 6.00-2.0 6.00-2.0 0.60-2.00	0.16-0.18 0.06-0.11 0.06-0.12 0.15-0.19	0.0-2.9 0.0-2.9 0.0-2.9 1.0-4.2	3.0-8.0 0.5-2.0 0.1-0.5 0.0-0.5	.20 .17 .17 .37	.20 .17 .17 .37	5	3	86
Roliss-----	5	0-14 14-20 20-80	18-27 18-30 18-30	1.10-1.50 1.35-1.55 1.35-1.55	0.20-2.00 0.60-2.00 0.60-2.00	0.17-0.24 0.15-0.19 0.15-0.19	3.0-5.9 1.0-4.2 1.0-4.2	3.0-8.0 0.5-2.0 0.0-0.5	.24 .37 .37	.24 .37 .37	5	4L	86
Flaming-----	4	0-12 12-17 17-27 27-60	2-10 2-10 2-8 1-8	1.20-1.40 1.30-1.50 1.30-1.50 1.50-1.70	6.00-2.0 6.00-2.0 6.00-2.0 6.00-2.0	0.10-0.12 0.06-0.12 0.05-0.12 0.05-0.10	0.0-2.9 0.0-2.9 0.0-2.9 0.0-2.9	2.0-4.0 0.5-3.0 0.2-1.0 0.0-0.5	.17 .17 .17 .17	.17 .17 .17 .17	5	2	134

Table 23.--Physical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Clay	Moist bulk density	Permea- bility	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
		In	Pct	g/cc	In/hr	In/in	Pct	Pct					
<b>I17A:</b>													
Grimstad-----	2	0-9	10-18	1.15-1.45	2.00-6.00	0.14-0.18	0.0-2.9	2.0-5.0	.20	.20	5	3	86
		9-22	5-15	1.30-1.60	6.00-20	0.09-0.17	0.0-2.9	0.2-1.0	.20	.20			
		22-28	2-8	1.45-1.60	6.00-20	0.05-0.14	0.0-2.9	0.1-0.5	.20	.20			
		28-60	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Linveldt-----	2	0-9	5-15	1.15-1.45	2.00-6.00	0.14-0.18	0.0-2.9	2.0-5.0	.20	.20	5	3	86
		9-16	12-25	1.25-1.50	0.60-6.00	0.12-0.18	0.0-2.9	0.2-2.0	.28	.28			
		16-29	1-8	1.45-1.65	6.00-20	0.05-0.11	0.0-2.9	0.1-0.5	.15	.17			
		29-45	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.2-1.0	.37	.37			
		45-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Eckvoll-----	1	0-9	2-10	1.20-1.40	6.00-20	0.10-0.12	0.0-2.9	0.5-3.0	.17	.17	5	2	134
		9-25	1-10	1.35-1.55	6.00-20	0.05-0.12	0.0-2.9	0.1-1.0	.15	.15			
		25-32	18-35	1.40-1.70	0.20-2.00	0.16-0.18	3.0-5.9	0.1-1.0	.37	.37			
		32-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Strathcona-----	1	0-10	5-18	1.20-1.50	2.00-20	0.13-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		10-17	10-18	1.30-1.50	2.00-6.00	0.09-0.17	0.0-2.9	0.5-2.0	.24	.24			
		17-28	2-8	1.35-1.60	6.00-20	0.05-0.12	0.0-2.9	0.1-0.5	.15	.15			
		28-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
<b>I18A:</b>													
Foldahl-----	75	0-12	2-10	1.20-1.40	6.00-20	0.10-0.14	0.0-2.9	2.0-4.0	.17	.17	5	2	134
		12-30	1-10	1.45-1.60	6.00-20	0.07-0.12	0.0-2.9	0.2-1.0	.17	.17			
		30-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Kratka-----	10	0-11	5-18	1.20-1.50	2.00-6.00	0.16-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		11-18	2-10	1.30-1.60	6.00-20	0.06-0.11	0.0-2.9	0.5-2.0	.17	.17			
		18-25	2-8	1.30-1.60	6.00-20	0.06-0.12	0.0-2.9	0.1-0.5	.17	.17			
		25-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Roliss-----	5	0-14	18-27	1.10-1.50	0.20-2.00	0.17-0.24	3.0-5.9	3.0-8.0	.24	.24	5	4L	86
		14-20	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.5-2.0	.37	.37			
		20-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Flaming-----	4	0-12	2-10	1.20-1.40	6.00-20	0.10-0.12	0.0-2.9	2.0-4.0	.17	.17	5	2	134
		12-17	2-10	1.30-1.50	6.00-20	0.06-0.12	0.0-2.9	0.5-3.0	.17	.17			
		17-27	2-8	1.30-1.50	6.00-20	0.05-0.12	0.0-2.9	0.2-1.0	.17	.17			
		27-60	1-8	1.50-1.70	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.17	.17			
Grimstad-----	2	0-9	10-18	1.15-1.45	2.00-6.00	0.14-0.18	0.0-2.9	2.0-5.0	.20	.20	5	3	86
		9-22	5-15	1.30-1.60	6.00-20	0.09-0.17	0.0-2.9	0.2-1.0	.20	.20			
		22-28	2-8	1.45-1.60	6.00-20	0.05-0.14	0.0-2.9	0.1-0.5	.20	.20			
		28-60	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			

Table 23.--Physical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Clay	Moist bulk density	Permea- bility	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
<b>I18A:</b>													
Linveltdt-----	2	0-9	5-15	1.15-1.45	2.00-6.00	0.14-0.18	0.0-2.9	2.0-5.0	.20	.20	5	3	86
		9-16	12-25	1.25-1.50	0.60-6.00	0.12-0.18	0.0-2.9	0.2-2.0	.28	.28			
		16-29	1-8	1.45-1.65	6.00-20	0.05-0.11	0.0-2.9	0.1-0.5	.15	.17			
		29-45	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.2-1.0	.37	.37			
		45-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Eckvoll-----	1	0-9	2-10	1.20-1.40	6.00-20	0.10-0.12	0.0-2.9	0.5-3.0	.17	.17	5	2	134
		9-25	1-10	1.35-1.55	6.00-20	0.05-0.12	0.0-2.9	0.1-1.0	.15	.15			
		25-32	18-35	1.40-1.70	0.20-2.00	0.16-0.18	3.0-5.9	0.1-1.0	.37	.37			
		32-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Strathcona-----	1	0-10	5-18	1.20-1.50	2.00-20	0.13-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		10-17	10-18	1.30-1.50	2.00-6.00	0.09-0.17	0.0-2.9	0.5-2.0	.24	.24			
		17-28	2-8	1.35-1.60	6.00-20	0.05-0.12	0.0-2.9	0.1-0.5	.15	.15			
		28-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
<b>I19A:</b>													
Foxhome-----	65	0-10	5-15	1.15-1.45	2.00-6.00	0.13-0.15	0.0-2.9	2.0-5.0	.20	.20	5	3	86
		10-15	2-10	1.40-1.60	6.00-20	0.07-0.12	0.0-2.9	0.2-1.0	.15	.20			
		15-23	1-5	1.50-1.70	6.00-20	0.02-0.07	0.0-2.9	0.1-0.5	.05	.15			
		23-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Kittson-----	10	0-10	10-27	1.00-1.30	0.60-2.00	0.20-0.22	0.0-2.9	2.0-5.0	.24	.24	5	5	56
		10-17	15-25	1.35-1.55	0.60-2.00	0.12-0.19	0.0-2.9	0.2-2.0	.32	.32			
		17-36	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.1-1.0	.37	.37			
		36-60	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Strandquist-----	10	0-10	10-18	1.10-1.40	2.00-6.00	0.20-0.22	0.0-2.9	3.0-8.0	.24	.24	5	4L	86
		10-20	1-8	1.50-1.70	6.00-20	0.02-0.07	0.0-2.9	0.5-2.0	.10	.15			
		20-60	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Foldahl-----	5	0-12	5-15	1.15-1.45	2.00-6.00	0.14-0.18	0.0-2.9	2.0-5.0	.20	.20	5	3	86
		12-30	1-10	1.45-1.60	6.00-20	0.07-0.12	0.0-2.9	0.2-1.0	.17	.17			
		30-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Grimstad-----	5	0-9	10-18	1.15-1.45	2.00-6.00	0.14-0.18	0.0-2.9	2.0-5.0	.20	.20	5	3	86
		9-22	5-15	1.30-1.60	6.00-20	0.09-0.17	0.0-2.9	0.2-1.0	.20	.20			
		22-28	2-8	1.45-1.60	6.00-20	0.05-0.14	0.0-2.9	0.1-0.5	.20	.20			
		28-60	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Roliss-----	3	0-14	18-27	1.10-1.50	0.20-2.00	0.17-0.24	3.0-5.9	3.0-8.0	.24	.24	5	4L	86
		14-20	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.5-2.0	.37	.37			
		20-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			

Table 23.--Physical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Clay	Moist bulk density	Permea- bility	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
		In	Pct	g/cc	In/hr	In/in	Pct	Pct					
I19A: Mavie-----	2	0-12	10-18	1.20-1.50	2.00-6.00	0.16-0.18	0.0-2.9	3.0-8.0	.20	.20	3	3	86
		12-18	10-25	1.35-1.55	0.60-2.00	0.12-0.19	0.0-2.9	0.5-2.0	.28	.28			
		18-39	1-10	1.40-1.65	6.00-20	0.03-0.06	0.0-2.9	0.0-0.5	.10	.15			
		39-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
I20A: Foxlake-----	75	0-19	18-27	1.15-1.35	0.60-6.00	0.20-0.22	0.0-2.9	3.0-8.0	.24	.24	5	4L	86
		19-38	35-60	1.25-1.45	0.06-0.20	0.09-0.19	6.0-8.9	0.5-2.0	.28	.28			
		38-49	35-60	1.25-1.45	0.06-0.20	0.09-0.19	6.0-8.9	0.1-0.5	.28	.28			
		49-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Clearwater-----	5	0-8	40-60	1.10-1.30	0.06-0.20	0.13-0.17	6.0-8.9	3.0-8.0	.28	.28	5	4	86
		8-35	35-60	1.20-1.50	0.06-0.20	0.10-0.19	6.0-8.9	0.5-2.0	.32	.32			
		35-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Foxlake, very cobbly--	5	0-19	18-27	1.15-1.35	0.60-6.00	0.20-0.22	0.0-2.9	3.0-8.0	.20	.24	5	4L	86
		19-38	35-60	1.25-1.45	0.06-0.20	0.09-0.19	6.0-8.9	0.5-2.0	.28	.28			
		38-49	35-60	1.25-1.45	0.06-0.20	0.09-0.19	6.0-8.9	0.1-0.5	.28	.28			
		49-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Augsburg-----	3	0-11	15-22	0.95-1.20	0.60-2.00	0.20-0.23	0.0-2.9	3.0-8.0	.28	.28	5	4L	86
		11-18	5-18	1.30-1.50	0.60-6.00	0.17-0.22	0.0-2.9	0.2-2.0	.28	.28			
		18-33	5-18	1.40-1.60	0.60-6.00	0.17-0.22	0.0-2.9	0.1-0.5	.28	.28			
		33-60	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Clearwater, depressional-----	3	0-8	27-35	1.20-1.45	0.20-2.00	0.17-0.30	3.0-5.9	3.0-15	.24	.24	5	6	48
		8-35	35-60	1.20-1.50	0.06-0.20	0.10-0.19	6.0-8.9	1.0-3.0	.32	.32			
		35-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Espelie-----	3	0-9	5-18	1.20-1.45	2.00-6.00	0.13-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		9-24	3-10	1.35-1.60	2.00-20	0.06-0.11	0.0-2.9	0.5-1.0	.17	.17			
		24-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Hilaire-----	2	0-10	5-15	1.15-1.45	2.00-6.00	0.10-0.12	0.0-2.9	2.0-5.0	.20	.20	5	2	134
		10-34	1-8	1.35-1.60	6.00-20	0.07-0.11	0.0-2.9	0.5-1.0	.15	.15			
		34-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Reis-----	2	0-9	40-60	1.10-1.30	0.06-0.20	0.13-0.17	6.0-8.9	3.0-8.0	.28	.28	5	4	86
		9-17	40-60	1.20-1.50	0.06-0.20	0.13-0.17	6.0-8.9	0.5-8.0	.32	.32			
		17-33	40-60	1.20-1.50	0.06-0.20	0.13-0.17	6.0-8.9	0.5-2.0	.32	.32			
		33-42	40-60	1.30-1.60	0.06-0.20	0.10-0.16	6.0-8.9	0.2-1.0	.32	.32			
		42-60	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
		60-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			

Table 23.--Physical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Clay	Moist bulk density	Permea- bility	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind	Wind
									Kw	Kf	T	erodi- bility group	erodi- bility index
<b>I20A:</b>													
Wheatville-----	2	0-9	10-20	1.25-1.40	0.60-2.00	0.18-0.22	0.0-2.9	2.0-6.0	.28	.28	5	3	86
		9-31	10-18	1.30-1.50	0.60-6.00	0.17-0.22	0.0-2.9	0.2-2.0	.43	.43			
		31-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
<b>I21A:</b>													
Fram-----	85	0-7	10-18	1.00-1.30	0.60-2.00	0.20-0.22	0.0-2.9	2.0-5.0	.24	.24	5	4L	86
		7-38	7-18	1.40-1.60	0.60-2.00	0.13-0.20	0.0-2.9	0.2-2.0	.37	.37			
		38-60	7-18	1.40-1.60	0.60-2.00	0.13-0.20	0.0-2.9	0.0-0.5	.37	.37			
Hedman-----	12	0-11	10-18	1.30-1.50	0.60-2.00	0.20-0.22	0.0-2.9	3.0-8.0	.24	.24	5	4L	86
		11-20	7-18	1.40-1.60	0.60-2.00	0.13-0.20	0.0-2.9	0.2-2.0	.37	.37			
		20-80	7-18	1.40-1.60	0.60-2.00	0.13-0.20	0.0-2.9	0.0-0.5	.37	.37			
Strathcona-----	2	0-10	5-18	1.20-1.50	2.00-20	0.13-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		10-17	10-18	1.30-1.50	2.00-6.00	0.09-0.17	0.0-2.9	0.5-2.0	.24	.24			
		17-28	2-8	1.35-1.60	6.00-20	0.05-0.12	0.0-2.9	0.1-0.5	.15	.15			
		28-80	7-18	1.40-1.60	0.60-2.00	0.13-0.20	0.0-2.9	0.0-0.5	.37	.37			
Foxhome-----	1	0-10	5-15	1.15-1.45	2.00-6.00	0.13-0.15	0.0-2.9	2.0-5.0	.20	.20	5	3	86
		10-15	2-10	1.40-1.60	6.00-20	0.07-0.12	0.0-2.9	0.2-1.0	.15	.20			
		15-23	1-5	1.50-1.70	6.00-20	0.02-0.07	0.0-2.9	0.1-0.5	.05	.15			
		23-80	7-18	1.40-1.60	0.60-2.00	0.13-0.20	0.0-2.9	0.0-0.5	.37	.37			
<b>I22A:</b>													
Glyndon-----	75	0-11	15-22	1.05-1.25	0.60-2.00	0.20-0.23	0.0-2.9	2.0-6.0	.28	.28	5	4L	86
		11-28	10-18	1.30-1.50	0.60-6.00	0.17-0.22	0.0-2.9	0.2-2.0	.28	.28			
		28-60	5-18	1.35-1.65	0.60-6.00	0.08-0.22	0.0-2.9	0.0-0.5	.28	.28			
Borup-----	10	0-12	15-22	0.95-1.20	0.60-2.00	0.20-0.23	0.0-2.9	3.0-8.0	.28	.28	5	4L	86
		12-34	10-18	1.30-1.50	0.60-6.00	0.17-0.22	0.0-2.9	0.2-2.0	.28	.28			
		34-60	5-18	1.35-1.65	0.60-6.00	0.08-0.22	0.0-2.9	0.0-0.5	.28	.28			
Augsburg-----	5	0-11	15-22	0.95-1.20	0.60-2.00	0.20-0.23	0.0-2.9	3.0-8.0	.28	.28	5	4L	86
		11-18	5-18	1.30-1.50	0.60-6.00	0.17-0.22	0.0-2.9	0.2-2.0	.28	.28			
		18-33	5-18	1.40-1.60	0.60-6.00	0.17-0.22	0.0-2.9	0.1-0.5	.28	.28			
		33-60	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Ulen-----	5	0-9	8-18	1.15-1.45	2.00-6.00	0.13-0.18	0.0-2.9	2.0-5.0	.20	.20	3	3	86
		9-42	5-15	1.30-1.60	2.00-6.00	0.09-0.17	0.0-2.9	0.2-1.0	.24	.24			
		42-60	2-8	1.45-1.65	6.00-20	0.05-0.08	0.0-2.9	0.0-0.5	.15	.15			
Wheatville-----	3	0-9	10-20	1.25-1.40	0.60-2.00	0.18-0.22	0.0-2.9	2.0-6.0	.28	.28	5	3	86
		9-31	10-18	1.30-1.50	0.60-6.00	0.17-0.22	0.0-2.9	0.2-2.0	.43	.43			
		31-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			

Table 23.--Physical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Clay	Moist bulk density	Permea- bility	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index	
									Kw	Kf	T			
I22A: Flaming-----	2	In	Pct	g/cc	In/hr	In/in	Pct	Pct						
		0-12	2-10	1.20-1.40	6.00-20	0.10-0.12	0.0-2.9	2.0-4.0	.17	.17	5	2	134	
		12-17	2-10	1.30-1.50	6.00-20	0.06-0.12	0.0-2.9	0.5-3.0	.17	.17				
		17-27	2-8	1.30-1.50	6.00-20	0.05-0.12	0.0-2.9	0.2-1.0	.17	.17				
		27-60	1-8	1.50-1.70	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.17	.17				
I23A: Glyndon-----	75	0-11	10-20	1.05-1.25	0.60-2.00	0.20-0.23	0.0-2.9	2.0-6.0	.28	.28	5	3	86	
		11-28	10-18	1.30-1.50	0.60-6.00	0.17-0.22	0.0-2.9	0.2-2.0	.28	.28				
		28-60	5-18	1.35-1.65	0.60-6.00	0.08-0.22	0.0-2.9	0.0-0.5	.28	.28				
Borup-----	10	0-12	10-20	1.15-1.35	0.60-2.00	0.20-0.23	0.0-2.9	3.0-8.0	.28	.28	5	3	86	
		12-34	10-18	1.30-1.50	0.60-6.00	0.17-0.22	0.0-2.9	0.2-2.0	.28	.28				
		34-60	5-18	1.35-1.65	0.60-6.00	0.08-0.22	0.0-2.9	0.0-0.5	.28	.28				
Augsburg-----	5	0-11	15-22	0.95-1.20	0.60-2.00	0.20-0.23	0.0-2.9	3.0-8.0	.28	.28	5	4L	86	
		11-18	5-18	1.30-1.50	0.60-6.00	0.17-0.22	0.0-2.9	0.2-2.0	.28	.28				
		18-33	5-18	1.40-1.60	0.60-6.00	0.17-0.22	0.0-2.9	0.1-0.5	.28	.28				
		33-60	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28				
Ulen-----	5	0-9	2-10	1.20-1.40	6.00-20	0.10-0.12	0.0-2.9	2.0-5.0	.17	.17	5	2	134	
		9-42	5-15	1.30-1.60	2.00-6.00	0.09-0.17	0.0-2.9	0.2-1.0	.24	.24				
		42-60	2-8	1.45-1.65	6.00-20	0.05-0.08	0.0-2.9	0.0-0.5	.15	.15				
Wheatville-----	3	0-9	10-20	1.25-1.40	0.60-2.00	0.18-0.22	0.0-2.9	2.0-6.0	.28	.28	5	3	86	
		9-31	10-18	1.30-1.50	0.60-6.00	0.17-0.22	0.0-2.9	0.2-2.0	.43	.43				
		31-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28				
Flaming-----	2	0-12	2-10	1.20-1.40	6.00-20	0.10-0.12	0.0-2.9	2.0-4.0	.17	.17	5	2	134	
		12-17	2-10	1.30-1.50	6.00-20	0.06-0.12	0.0-2.9	0.5-3.0	.17	.17				
		17-27	2-8	1.30-1.50	6.00-20	0.05-0.12	0.0-2.9	0.2-1.0	.17	.17				
		27-60	1-8	1.50-1.70	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.17	.17				
I24A: Grimstad-----	70	0-9	10-18	1.15-1.45	2.00-6.00	0.14-0.18	0.0-2.9	2.0-5.0	.20	.20	5	3	86	
		9-22	5-15	1.30-1.60	6.00-20	0.09-0.17	0.0-2.9	0.2-1.0	.20	.20				
		22-28	2-8	1.45-1.60	6.00-20	0.05-0.14	0.0-2.9	0.1-0.5	.20	.20				
		28-60	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37				
Strathcona-----	12	0-10	5-18	1.20-1.50	2.00-20	0.13-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86	
		10-17	10-18	1.30-1.50	2.00-6.00	0.09-0.17	0.0-2.9	0.5-2.0	.24	.24				
		17-28	2-8	1.35-1.60	6.00-20	0.05-0.12	0.0-2.9	0.1-0.5	.15	.15				
		28-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37				

Table 23.--Physical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Clay	Moist bulk density	Permea- bility	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
<b>I24A:</b>													
Foldahl-----	5	0-12	5-15	1.15-1.45	2.00-6.00	0.14-0.18	0.0-2.9	2.0-5.0	.20	.20	5	3	86
		12-30	1-10	1.45-1.60	6.00-20	0.07-0.12	0.0-2.9	0.2-1.0	.17	.17			
		30-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Hamerly-----	5	0-8	18-27	1.00-1.30	0.60-2.00	0.20-0.22	3.0-5.9	2.0-5.0	.24	.24	5	4L	86
		8-25	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.2-2.0	.37	.37			
		25-60	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Foxhome-----	2	0-10	5-15	1.15-1.45	2.00-6.00	0.13-0.15	0.0-2.9	2.0-5.0	.20	.20	5	3	86
		10-15	2-10	1.40-1.60	6.00-20	0.07-0.12	0.0-2.9	0.2-1.0	.15	.20			
		15-23	1-5	1.50-1.70	6.00-20	0.02-0.07	0.0-2.9	0.1-0.5	.05	.15			
		23-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Karlsruhe-----	2	0-15	5-15	1.10-1.40	2.00-6.00	0.10-0.15	0.0-2.9	2.0-6.0	.20	.20	5	3	86
		15-30	2-12	1.20-1.60	2.00-20	0.09-0.14	0.0-2.9	0.5-2.0	.20	.20			
		30-60	0-5	1.30-1.60	6.00-40	0.02-0.07	0.0-2.9	0.0-0.5	.10	.15			
Mavie-----	2	0-12	10-18	1.20-1.50	2.00-6.00	0.16-0.18	0.0-2.9	3.0-8.0	.20	.20	3	3	86
		12-18	10-25	1.35-1.55	0.60-2.00	0.12-0.19	0.0-2.9	0.5-2.0	.28	.28			
		18-39	1-10	1.40-1.65	6.00-20	0.03-0.06	0.0-2.9	0.0-0.5	.10	.15			
		39-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Ulen-----	2	0-9	8-18	1.15-1.45	2.00-6.00	0.13-0.18	0.0-2.9	2.0-5.0	.20	.20	3	3	86
		9-42	5-15	1.30-1.60	2.00-6.00	0.09-0.17	0.0-2.9	0.2-1.0	.24	.24			
		42-60	2-8	1.45-1.65	6.00-20	0.05-0.08	0.0-2.9	0.0-0.5	.15	.15			
<b>I25A:</b>													
Hamar-----	75	0-12	2-10	1.20-1.40	2.00-20	0.10-0.13	0.0-2.9	3.0-8.0	.17	.17	5	2	134
		12-17	2-10	1.35-1.55	2.00-20	0.06-0.12	0.0-2.9	0.5-2.0	.17	.17			
		17-40	1-8	1.45-1.65	2.00-20	0.06-0.10	0.0-2.9	0.0-0.5	.17	.17			
		40-47	2-10	1.30-1.50	2.00-20	0.10-0.13	0.0-2.9	1.0-4.0	.17	.17			
		47-60	1-8	1.45-1.65	2.00-20	0.06-0.10	0.0-2.9	0.0-0.5	.17	.17			
Garborg-----	10	0-12	2-10	1.20-1.40	6.00-20	0.10-0.13	0.0-2.9	2.0-6.0	.17	.17	5	2	134
		12-41	2-10	1.35-1.55	2.00-20	0.06-0.12	0.0-2.9	0.5-2.0	.17	.17			
		41-59	1-8	1.45-1.65	2.00-20	0.06-0.10	0.0-2.9	0.0-0.5	.17	.17			
		59-80	1-8	1.45-1.65	2.00-20	0.06-0.10	0.0-2.9	0.0-0.5	.17	.17			
Rosewood-----	7	0-8	5-18	1.00-1.35	2.00-6.00	0.16-0.18	0.0-2.9	3.0-8.0	.24	.24	3	3	86
		8-18	6-18	1.30-1.50	2.00-6.00	0.09-0.17	0.0-2.9	0.5-2.0	.24	.24			
		18-80	2-8	1.45-1.65	6.00-20	0.05-0.08	0.0-2.9	0.0-0.5	.15	.15			
Venlo-----	3	0-13	5-10	1.20-1.30	6.00-20	0.13-0.18	0.0-2.9	3.0-15	.20	.20	5	3	86
		13-60	1-8	1.45-1.65	2.00-20	0.06-0.10	0.0-2.9	0.0-0.5	.17	.17			

Table 23.--Physical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Clay	Moist bulk density	Permea- bility	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
		In	Pct	g/cc	In/hr	In/in	Pct	Pct					
I25A: Flaming-----	2	0-12	2-10	1.20-1.40	6.00-20	0.10-0.12	0.0-2.9	2.0-4.0	.17	.17	5	2	134
		12-17	2-10	1.30-1.50	6.00-20	0.06-0.12	0.0-2.9	0.5-3.0	.17	.17			
		17-27	2-8	1.30-1.50	6.00-20	0.05-0.12	0.0-2.9	0.2-1.0	.17	.17			
		27-60	1-8	1.50-1.70	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.17	.17			
Hangaard-----	2	0-10	8-18	1.10-1.40	2.00-6.00	0.10-0.15	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		10-15	5-15	1.10-1.45	6.00-20	0.07-0.11	0.0-2.9	1.0-3.0	.17	.17			
		15-80	1-5	1.50-1.70	6.00-40	0.02-0.04	0.0-2.9	0.0-0.5	.10	.15			
Kratka-----	1	0-11	5-18	1.20-1.50	2.00-6.00	0.16-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		11-18	2-10	1.30-1.60	6.00-20	0.06-0.11	0.0-2.9	0.5-2.0	.17	.17			
		18-25	2-8	1.30-1.60	6.00-20	0.06-0.12	0.0-2.9	0.1-0.5	.17	.17			
		25-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
I26A: Hamerly-----	75	0-8	18-27	1.00-1.30	0.60-2.00	0.20-0.22	3.0-5.9	2.0-5.0	.24	.24	5	4L	86
		8-25	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.2-2.0	.37	.37			
		25-60	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Vallers-----	12	0-12	18-27	1.10-1.35	0.60-2.00	0.20-0.22	0.0-2.9	3.0-8.0	.24	.24	5	4L	86
		12-21	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.5-2.0	.37	.37			
		21-60	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Foxhome-----	3	0-10	5-15	1.15-1.45	2.00-6.00	0.13-0.15	0.0-2.9	2.0-5.0	.20	.20	5	3	86
		10-15	2-10	1.40-1.60	6.00-20	0.07-0.12	0.0-2.9	0.2-1.0	.15	.20			
		15-23	1-5	1.50-1.70	6.00-20	0.02-0.07	0.0-2.9	0.1-0.5	.05	.15			
		23-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Grimstad-----	3	0-9	10-18	1.15-1.45	2.00-6.00	0.14-0.18	0.0-2.9	2.0-5.0	.20	.20	5	3	86
		9-22	5-15	1.30-1.60	6.00-20	0.09-0.17	0.0-2.9	0.2-1.0	.20	.20			
		22-28	2-8	1.45-1.60	6.00-20	0.05-0.14	0.0-2.9	0.1-0.5	.20	.20			
		28-60	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Hamerly, very cobbly--	3	0-8	18-27	1.00-1.30	0.60-2.00	0.20-0.22	3.0-5.9	2.0-5.0	.20	.24	5	4L	86
		8-25	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.2-2.0	.37	.37			
		25-60	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Strathcona-----	3	0-10	5-18	1.20-1.50	2.00-20	0.13-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		10-17	10-18	1.30-1.50	2.00-6.00	0.09-0.17	0.0-2.9	0.5-2.0	.24	.24			
		17-28	2-8	1.35-1.60	6.00-20	0.05-0.12	0.0-2.9	0.1-0.5	.15	.15			
		28-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			

Table 23.--Physical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Clay	Moist bulk density	Permea- bility	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
I26A: Roliss, depressional--	1	0-14 14-20 20-80	15-27 18-30 18-30	1.10-1.40 1.35-1.55 1.35-1.55	0.20-2.00 0.60-2.00 0.60-2.00	0.20-0.25 0.15-0.19 0.15-0.19	3.0-5.9 1.0-4.2 1.0-4.2	3.0-15 1.0-3.0 0.0-0.5	.24 .37 .37	.24 .37 .37	5	6	48
I27A: Hamre-----	80	0-13 13-18 18-71 71-80	0-0 18-35 18-30 18-30	0.10-0.40 1.25-1.50 1.35-1.55 1.35-1.55	0.20-6.00 0.20-2.00 0.60-2.00 0.60-2.00	0.35-0.48 0.17-0.22 0.15-0.19 0.15-0.19	--- 3.0-5.9 1.0-4.2 1.0-4.2	50-95 2.0-10 0.0-0.5 0.0-0.5	.02 .32 .37 .37	.02 .32 .37 .37	5	2	134
Northwood-----	5	0-9 9-14 14-24 24-80	0-0 5-15 2-8 18-30	0.10-0.40 1.25-1.45 1.45-1.70 1.35-1.55	0.20-6.00 2.00-20 6.00-20 0.60-2.00	0.35-0.48 0.10-0.18 0.06-0.11 0.15-0.19	--- 0.0-2.9 0.0-2.9 1.0-4.2	50-95 2.0-10 0.1-0.5 0.0-0.5	.02 .15 .15 .37	.02 .15 .15 .37	4	2	134
Roliss-----	5	0-14 14-20 20-80	18-27 18-30 18-30	1.10-1.50 1.35-1.55 1.35-1.55	0.20-2.00 0.60-2.00 0.60-2.00	0.17-0.24 0.15-0.19 0.15-0.19	3.0-5.9 1.0-4.2 1.0-4.2	3.0-8.0 0.5-2.0 0.0-0.5	.24 .37 .37	.24 .37 .37	5	4L	86
Smiley-----	5	0-12 12-19 19-42 42-80	18-27 18-35 18-30 18-30	1.20-1.50 1.35-1.65 1.35-1.55 1.35-1.55	0.60-2.00 0.60-2.00 0.60-2.00 0.60-2.00	0.20-0.24 0.15-0.19 0.15-0.19 0.15-0.19	0.0-2.9 3.0-5.9 1.0-4.2 1.0-4.2	3.0-8.0 0.5-2.0 0.2-1.0 0.0-0.5	.24 .24 .37 .37	.24 .24 .37 .37	5	5	56
Cathro-----	3	0-11 11-23 23-60	0-0 0-0 18-30	0.10-0.35 0.10-0.35 1.35-1.55	0.20-6.00 0.20-6.00 0.60-2.00	0.35-0.48 0.35-0.48 0.15-0.19	--- --- 1.0-4.2	75-95 85-95 0.0-1.0	.02 .02 .37	.02 .02 .37	2	2	134
Kratka-----	2	0-11 11-18 18-25 25-80	5-18 2-10 2-8 18-30	1.20-1.50 1.30-1.60 1.30-1.60 1.35-1.55	2.00-6.00 6.00-20 6.00-20 0.60-2.00	0.16-0.18 0.06-0.11 0.06-0.12 0.15-0.19	0.0-2.9 0.0-2.9 0.0-2.9 1.0-4.2	3.0-8.0 0.5-2.0 0.1-0.5 0.0-0.5	.20 .17 .17 .37	.20 .17 .17 .37	5	3	86
I28A: Hangaard-----	75	0-10 10-15 15-80	8-18 5-15 1-5	1.10-1.40 1.10-1.45 1.50-1.70	2.00-6.00 6.00-20 6.00-40	0.10-0.15 0.07-0.11 0.02-0.04	0.0-2.9 0.0-2.9 0.0-2.9	3.0-8.0 1.0-3.0 0.0-0.5	.20 .17 .10	.20 .17 .15	5	3	86
Hamar-----	7	0-12 12-17 17-40 40-47 47-60	2-10 2-10 1-8 2-10 1-8	1.20-1.40 1.35-1.55 1.45-1.65 1.30-1.50 1.45-1.65	2.00-20 2.00-20 2.00-20 2.00-20 2.00-20	0.10-0.13 0.06-0.12 0.06-0.10 0.10-0.13 0.06-0.10	0.0-2.9 0.0-2.9 0.0-2.9 0.0-2.9 0.0-2.9	3.0-8.0 0.5-2.0 0.0-0.5 1.0-4.0 0.0-0.5	.17 .17 .17 .17 .17	.17 .17 .17 .17 .17	5	2	134

Table 23.--Physical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth In	Clay Pct	Moist bulk density g/cc	Permea- bility In/hr	Available water capacity In/in	Linear extensi- bility Pct	Organic matter Pct	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
<b>I28A:</b>													
Syrene-----	7	0-9	8-18	1.10-1.40	0.60-2.00	0.13-0.15	0.0-2.9	3.0-8.0	.20	.20	3	3	86
		9-17	10-25	1.30-1.50	2.00-6.00	0.12-0.19	0.0-2.9	0.5-2.0	.32	.32			
		17-27	1-5	1.50-1.70	6.00-20	0.02-0.04	0.0-2.9	0.0-0.5	.05	.10			
		27-60	1-5	1.50-1.70	6.00-20	0.02-0.04	0.0-2.9	0.0-0.5	.05	.10			
Karlsruhe-----	3	0-15	5-15	1.10-1.40	2.00-6.00	0.10-0.15	0.0-2.9	2.0-6.0	.20	.20	5	3	86
		15-30	2-12	1.20-1.60	2.00-20	0.09-0.14	0.0-2.9	0.5-2.0	.20	.20			
		30-60	0-5	1.30-1.60	6.00-40	0.02-0.07	0.0-2.9	0.0-0.5	.10	.15			
Rosewood-----	3	0-8	5-18	1.00-1.35	2.00-6.00	0.16-0.18	0.0-2.9	3.0-8.0	.24	.24	3	3	86
		8-18	6-18	1.30-1.50	2.00-6.00	0.09-0.17	0.0-2.9	0.5-2.0	.24	.24			
		18-80	2-8	1.45-1.65	6.00-20	0.05-0.08	0.0-2.9	0.0-0.5	.15	.15			
Strandquist-----	3	0-10	10-18	1.10-1.40	2.00-6.00	0.20-0.22	0.0-2.9	3.0-8.0	.24	.24	5	4L	86
		10-20	1-8	1.50-1.70	6.00-20	0.02-0.07	0.0-2.9	0.5-2.0	.10	.15			
		20-60	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Deerwood-----	2	0-10	0-0	0.15-0.35	0.20-6.00	0.35-0.48	---	50-95	.02	.02	3	2	134
		10-12	2-15	1.25-1.45	2.00-20	0.09-0.17	0.0-2.9	2.0-10	.17	.17			
		12-60	1-8	1.50-1.70	6.00-20	0.02-0.10	0.0-2.9	0.0-0.5	.15	.17			
<b>I29A:</b>													
Hattie-----	75	0-8	40-60	1.10-1.30	0.06-0.20	0.13-0.17	6.0-8.9	2.0-5.0	.28	.28	5	4	86
		8-22	35-60	1.25-1.45	0.06-0.20	0.10-0.19	6.0-8.9	0.2-2.0	.28	.28			
		22-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Clearwater-----	12	0-8	40-60	1.10-1.30	0.06-0.20	0.13-0.17	6.0-8.9	3.0-8.0	.28	.28	5	4	86
		8-35	35-60	1.20-1.50	0.06-0.20	0.10-0.19	6.0-8.9	0.5-2.0	.32	.32			
		35-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Reis-----	6	0-9	40-60	1.10-1.30	0.06-0.20	0.13-0.17	6.0-8.9	3.0-8.0	.28	.28	5	4	86
		9-17	40-60	1.20-1.50	0.06-0.20	0.13-0.17	6.0-8.9	0.5-8.0	.32	.32			
		17-33	40-60	1.20-1.50	0.06-0.20	0.13-0.17	6.0-8.9	0.5-2.0	.32	.32			
		33-42	40-60	1.30-1.60	0.06-0.20	0.10-0.16	6.0-8.9	0.2-1.0	.32	.32			
		42-60	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
		60-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Hattie, very cobbly---	5	0-8	40-60	1.10-1.30	0.06-0.20	0.13-0.17	6.0-8.9	2.0-5.0	.24	.28	5	4	86
		8-22	35-60	1.25-1.45	0.06-0.20	0.10-0.19	6.0-8.9	0.2-2.0	.28	.28			
		22-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Hilaire-----	2	0-10	5-18	1.25-1.45	2.00-6.00	0.13-0.18	0.0-2.9	2.0-5.0	.20	.20	5	3	86
		10-34	1-8	1.35-1.60	6.00-20	0.07-0.11	0.0-2.9	0.5-1.0	.15	.15			
		34-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			

Table 23.--Physical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Clay	Moist bulk density	Permea- bility	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
<b>I29D:</b>													
Hattie-----	85	0-8	40-60	1.10-1.30	0.06-0.20	0.13-0.17	6.0-8.9	2.0-5.0	.28	.28	5	4	86
		8-22	35-60	1.25-1.45	0.06-0.20	0.10-0.19	6.0-8.9	0.2-2.0	.28	.28			
		22-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Clearwater-----	6	0-8	40-60	1.10-1.30	0.06-0.20	0.13-0.17	6.0-8.9	3.0-8.0	.28	.28	5	4	86
		8-35	35-60	1.20-1.50	0.06-0.20	0.10-0.19	6.0-8.9	0.5-2.0	.32	.32			
		35-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Hattie, level-----	5	0-8	40-60	1.10-1.30	0.06-0.20	0.13-0.17	6.0-8.9	2.0-5.0	.28	.28	5	4	86
		8-22	35-60	1.25-1.45	0.06-0.20	0.10-0.19	6.0-8.9	0.2-2.0	.28	.28			
		22-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Boyerlake-----	4	0-7	40-60	1.10-1.30	0.06-0.20	0.15-0.18	6.0-8.9	1.0-3.0	.32	.32	5	4	86
		7-37	35-60	1.30-1.60	0.06-0.20	0.10-0.16	6.0-8.9	0.2-1.0	.37	.37			
		37-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
<b>I30A:</b>													
Hedman-----	85	0-11	10-18	1.30-1.50	0.60-2.00	0.20-0.22	0.0-2.9	3.0-8.0	.24	.24	5	4L	86
		11-20	7-18	1.40-1.60	0.60-2.00	0.13-0.20	0.0-2.9	0.2-2.0	.37	.37			
		20-80	7-18	1.40-1.60	0.60-2.00	0.13-0.20	0.0-2.9	0.0-0.5	.37	.37			
Fram-----	5	0-7	10-18	1.00-1.30	0.60-2.00	0.20-0.22	0.0-2.9	2.0-5.0	.24	.24	5	4L	86
		7-38	7-18	1.40-1.60	0.60-2.00	0.13-0.20	0.0-2.9	0.2-2.0	.37	.37			
		38-60	7-18	1.40-1.60	0.60-2.00	0.13-0.20	0.0-2.9	0.0-0.5	.37	.37			
Strathcona-----	5	0-10	5-18	1.20-1.50	2.00-20	0.13-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		10-17	10-18	1.30-1.50	2.00-6.00	0.09-0.17	0.0-2.9	0.5-2.0	.24	.24			
		17-28	2-8	1.35-1.60	6.00-20	0.05-0.12	0.0-2.9	0.1-0.5	.15	.15			
		28-80	7-18	1.40-1.60	0.60-2.00	0.13-0.20	0.0-2.9	0.0-0.5	.37	.37			
Haug-----	3	0-10	0-0	0.13-0.42	0.60-6.00	0.35-0.48	---	50-90	.02	.02	5	2	134
		10-14	10-18	1.20-1.60	0.60-6.00	0.12-0.24	0.0-2.9	3.0-15	.20	.20			
		14-60	7-18	1.40-1.60	0.60-2.00	0.13-0.20	0.0-2.9	0.0-0.5	.37	.37			
Strandquist-----	2	0-10	10-18	1.10-1.40	2.00-6.00	0.20-0.22	0.0-2.9	3.0-8.0	.24	.24	5	4L	86
		10-20	1-8	1.50-1.70	6.00-20	0.02-0.07	0.0-2.9	0.5-2.0	.10	.15			
		20-60	7-18	1.40-1.60	0.60-2.00	0.13-0.20	0.0-2.9	0.0-0.5	.37	.37			
<b>I31A:</b>													
Hedman-----	50	0-11	10-18	1.30-1.50	0.60-2.00	0.20-0.22	0.0-2.9	3.0-8.0	.24	.24	5	4L	86
		11-20	7-18	1.40-1.60	0.60-2.00	0.13-0.20	0.0-2.9	0.2-2.0	.37	.37			
		20-80	7-18	1.40-1.60	0.60-2.00	0.13-0.20	0.0-2.9	0.0-0.5	.37	.37			

Table 23.--Physical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth In	Clay Pct	Moist bulk density g/cc	Permea- bility In/hr	Available water capacity In/in	Linear extensi- bility Pct	Organic matter Pct	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
<b>I31A:</b>													
Fram-----	40	0-7	10-18	1.00-1.30	0.60-2.00	0.20-0.22	0.0-2.9	2.0-5.0	.24	.24	5	4L	86
		7-38	7-18	1.40-1.60	0.60-2.00	0.13-0.20	0.0-2.9	0.2-2.0	.37	.37			
		38-60	7-18	1.40-1.60	0.60-2.00	0.13-0.20	0.0-2.9	0.0-0.5	.37	.37			
Strathcona-----	5	0-10	5-18	1.20-1.50	2.00-20	0.13-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		10-17	10-18	1.30-1.50	2.00-6.00	0.09-0.17	0.0-2.9	0.5-2.0	.24	.24			
		17-28	2-8	1.35-1.60	6.00-20	0.05-0.12	0.0-2.9	0.1-0.5	.15	.15			
		28-80	7-18	1.40-1.60	0.60-2.00	0.13-0.20	0.0-2.9	0.0-0.5	.37	.37			
Haug-----	3	0-10	0-0	0.13-0.42	0.60-6.00	0.35-0.48	---	50-90	.02	.02	5	2	134
		10-14	10-18	1.20-1.60	0.60-6.00	0.12-0.24	0.0-2.9	3.0-15	.20	.20			
		14-60	7-18	1.40-1.60	0.60-2.00	0.13-0.20	0.0-2.9	0.0-0.5	.37	.37			
Strandquist-----	2	0-10	10-18	1.10-1.40	2.00-6.00	0.20-0.22	0.0-2.9	3.0-8.0	.24	.24	5	4L	86
		10-20	1-8	1.50-1.70	6.00-20	0.02-0.07	0.0-2.9	0.5-2.0	.10	.15			
		20-60	7-18	1.40-1.60	0.60-2.00	0.13-0.20	0.0-2.9	0.0-0.5	.37	.37			
<b>I32A:</b>													
Hilaire-----	75	0-10	5-18	1.25-1.45	2.00-6.00	0.13-0.18	0.0-2.9	2.0-5.0	.20	.20	5	3	86
		10-34	1-8	1.35-1.60	6.00-20	0.07-0.11	0.0-2.9	0.5-1.0	.15	.15			
		34-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Espelie-----	12	0-9	5-18	1.20-1.45	2.00-6.00	0.13-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		9-24	3-10	1.35-1.60	2.00-20	0.06-0.11	0.0-2.9	0.5-1.0	.17	.17			
		24-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Huot-----	5	0-14	5-15	1.15-1.45	2.00-6.00	0.13-0.18	0.0-2.9	2.0-5.0	.20	.20	5	3	86
		14-26	5-15	1.30-1.60	2.00-6.00	0.09-0.17	0.0-2.9	0.2-1.0	.20	.20			
		26-34	2-8	1.55-1.70	6.00-20	0.06-0.11	0.0-2.9	0.1-0.5	.20	.20			
		34-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Flaming-----	2	0-12	2-10	1.20-1.40	6.00-20	0.10-0.12	0.0-2.9	2.0-4.0	.17	.17	5	2	134
		12-17	2-10	1.30-1.50	6.00-20	0.06-0.12	0.0-2.9	0.5-3.0	.17	.17			
		17-27	2-8	1.30-1.50	6.00-20	0.05-0.12	0.0-2.9	0.2-1.0	.17	.17			
		27-60	1-8	1.50-1.70	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.17	.17			
Foxlake-----	2	0-19	18-27	1.15-1.35	0.60-6.00	0.20-0.22	0.0-2.9	3.0-8.0	.24	.24	5	4L	86
		19-38	35-60	1.25-1.45	0.06-0.20	0.09-0.19	6.0-8.9	0.5-2.0	.28	.28			
		38-49	35-60	1.25-1.45	0.06-0.20	0.09-0.19	6.0-8.9	0.1-0.5	.28	.28			
		49-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Wheatville-----	2	0-9	10-20	1.25-1.40	0.60-2.00	0.18-0.22	0.0-2.9	2.0-6.0	.28	.28	5	3	86
		9-31	10-18	1.30-1.50	0.60-6.00	0.17-0.22	0.0-2.9	0.2-2.0	.43	.43			
		31-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			

Table 23.--Physical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Clay	Moist bulk density	Permea- bility	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
I32A:		In	Pct	g/cc	In/hr	In/in	Pct	Pct					
Thiefriver-----	1	0-12	8-18	1.20-1.45	2.00-6.00	0.13-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		12-23	10-18	1.30-1.50	2.00-6.00	0.09-0.17	0.0-2.9	0.5-2.0	.24	.24			
		23-32	2-8	1.45-1.70	6.00-20	0.06-0.11	0.0-2.9	0.1-0.5	.17	.17			
		32-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Wyandotte-----	1	0-8	27-30	1.20-1.45	0.60-2.00	0.14-0.19	0.0-2.9	3.0-8.0	.32	.32	5	4L	86
		8-15	18-25	1.25-1.50	0.60-2.00	0.14-0.18	0.0-2.9	0.2-2.0	.32	.32			
		15-34	1-5	1.40-1.70	6.00-20	0.02-0.07	0.0-2.9	0.1-0.5	.10	.15			
		34-60	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
I33A:													
Hilaire-----	75	0-10	2-10	1.20-1.40	6.00-20	0.10-0.14	0.0-2.9	2.0-4.0	.17	.17	5	2	134
		10-34	1-8	1.35-1.60	6.00-20	0.07-0.11	0.0-2.9	0.5-1.0	.15	.15			
		34-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Espelie-----	12	0-9	5-18	1.20-1.45	2.00-6.00	0.13-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		9-24	3-10	1.35-1.60	2.00-20	0.06-0.11	0.0-2.9	0.5-1.0	.17	.17			
		24-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Huot-----	5	0-14	5-15	1.15-1.45	2.00-6.00	0.13-0.18	0.0-2.9	2.0-5.0	.20	.20	5	3	86
		14-26	5-15	1.30-1.60	2.00-6.00	0.09-0.17	0.0-2.9	0.2-1.0	.20	.20			
		26-34	2-8	1.55-1.70	6.00-20	0.06-0.11	0.0-2.9	0.1-0.5	.20	.20			
		34-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Flaming-----	2	0-12	2-10	1.20-1.40	6.00-20	0.10-0.12	0.0-2.9	2.0-4.0	.17	.17	5	2	134
		12-17	2-10	1.30-1.50	6.00-20	0.06-0.12	0.0-2.9	0.5-3.0	.17	.17			
		17-27	2-8	1.30-1.50	6.00-20	0.05-0.12	0.0-2.9	0.2-1.0	.17	.17			
		27-60	1-8	1.50-1.70	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.17	.17			
Foxlake-----	2	0-19	18-27	1.15-1.35	0.60-6.00	0.20-0.22	0.0-2.9	3.0-8.0	.24	.24	5	4L	86
		19-38	35-60	1.25-1.45	0.06-0.20	0.09-0.19	6.0-8.9	0.5-2.0	.28	.28			
		38-49	35-60	1.25-1.45	0.06-0.20	0.09-0.19	6.0-8.9	0.1-0.5	.28	.28			
		49-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Wheatville-----	2	0-9	10-20	1.25-1.40	0.60-2.00	0.18-0.22	0.0-2.9	2.0-6.0	.28	.28	5	3	86
		9-31	10-18	1.30-1.50	0.60-6.00	0.17-0.22	0.0-2.9	0.2-2.0	.43	.43			
		31-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Thiefriver-----	1	0-12	8-18	1.20-1.45	2.00-6.00	0.13-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		12-23	10-18	1.30-1.50	2.00-6.00	0.09-0.17	0.0-2.9	0.5-2.0	.24	.24			
		23-32	2-8	1.45-1.70	6.00-20	0.06-0.11	0.0-2.9	0.1-0.5	.17	.17			
		32-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			

Table 23.--Physical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Clay	Moist bulk density	Permea- bility	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
		In	Pct	g/cc	In/hr	In/in	Pct	Pct					
I33A: Wyandotte-----	1	0-8	27-30	1.20-1.45	0.60-2.00	0.14-0.19	0.0-2.9	3.0-8.0	.32	.32	5	4L	86
		8-15	18-25	1.25-1.50	0.60-2.00	0.14-0.18	0.0-2.9	0.2-2.0	.32	.32			
		15-34	1-5	1.40-1.70	6.00-20	0.02-0.07	0.0-2.9	0.1-0.5	.10	.15			
		34-60	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
I34A: Huot-----	75	0-14	5-15	1.15-1.45	2.00-6.00	0.13-0.18	0.0-2.9	2.0-5.0	.20	.20	5	3	86
		14-26	5-15	1.30-1.60	2.00-6.00	0.09-0.17	0.0-2.9	0.2-1.0	.20	.20			
		26-34	2-8	1.55-1.70	6.00-20	0.06-0.11	0.0-2.9	0.1-0.5	.20	.20			
		34-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Thiefriver-----	12	0-12	8-18	1.20-1.45	2.00-6.00	0.13-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		12-23	10-18	1.30-1.50	2.00-6.00	0.09-0.17	0.0-2.9	0.5-2.0	.24	.24			
		23-32	2-8	1.45-1.70	6.00-20	0.06-0.11	0.0-2.9	0.1-0.5	.17	.17			
		32-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Hilaire-----	5	0-10	5-18	1.25-1.45	2.00-6.00	0.13-0.18	0.0-2.9	2.0-5.0	.20	.20	5	3	86
		10-34	1-8	1.35-1.60	6.00-20	0.07-0.11	0.0-2.9	0.5-1.0	.15	.15			
		34-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Flaming-----	3	0-12	2-10	1.20-1.40	6.00-20	0.10-0.12	0.0-2.9	2.0-4.0	.17	.17	5	2	134
		12-17	2-10	1.30-1.50	6.00-20	0.06-0.12	0.0-2.9	0.5-3.0	.17	.17			
		17-27	2-8	1.30-1.50	6.00-20	0.05-0.12	0.0-2.9	0.2-1.0	.17	.17			
		27-60	1-8	1.50-1.70	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.17	.17			
Foxlake-----	3	0-19	18-27	1.15-1.35	0.60-6.00	0.20-0.22	0.0-2.9	3.0-8.0	.24	.24	5	4L	86
		19-38	35-60	1.25-1.45	0.06-0.20	0.09-0.19	6.0-8.9	0.5-2.0	.28	.28			
		38-49	35-60	1.25-1.45	0.06-0.20	0.09-0.19	6.0-8.9	0.1-0.5	.28	.28			
		49-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Ulen-----	2	0-9	8-18	1.15-1.45	2.00-6.00	0.13-0.18	0.0-2.9	2.0-5.0	.20	.20	3	3	86
		9-42	5-15	1.30-1.60	2.00-6.00	0.09-0.17	0.0-2.9	0.2-1.0	.24	.24			
		42-60	2-8	1.45-1.65	6.00-20	0.05-0.08	0.0-2.9	0.0-0.5	.15	.15			
I35A: Karlsruhe-----	70	0-15	5-15	1.10-1.40	2.00-6.00	0.10-0.15	0.0-2.9	2.0-6.0	.20	.20	5	3	86
		15-30	2-12	1.20-1.60	2.00-20	0.09-0.14	0.0-2.9	0.5-2.0	.20	.20			
		30-60	0-5	1.30-1.60	6.00-40	0.02-0.07	0.0-2.9	0.0-0.5	.10	.15			
Syrene-----	10	0-9	8-18	1.10-1.40	0.60-2.00	0.13-0.15	0.0-2.9	3.0-8.0	.20	.20	3	3	86
		9-17	10-25	1.30-1.50	2.00-6.00	0.12-0.19	0.0-2.9	0.5-2.0	.32	.32			
		17-27	1-5	1.50-1.70	6.00-20	0.02-0.04	0.0-2.9	0.0-0.5	.05	.10			
		27-60	1-5	1.50-1.70	6.00-20	0.02-0.04	0.0-2.9	0.0-0.5	.05	.10			

Table 23.--Physical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Clay	Moist bulk density	Permea- bility	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
I35A:		In	Pct	g/cc	In/hr	In/in	Pct	Pct					
Ulen-----	10	0-9	2-10	1.20-1.40	6.00-20	0.10-0.12	0.0-2.9	2.0-5.0	.17	.17	5	2	134
		9-42	5-15	1.30-1.60	2.00-6.00	0.09-0.17	0.0-2.9	0.2-1.0	.24	.24			
		42-60	2-8	1.45-1.65	6.00-20	0.05-0.08	0.0-2.9	0.0-0.5	.15	.15			
Radium-----	5	0-14	2-8	1.20-1.40	6.00-20	0.06-0.12	0.0-2.9	1.0-3.0	.17	.17	5	2	134
		14-33	1-8	1.40-1.65	6.00-20	0.03-0.08	0.0-2.9	0.0-0.5	.10	.10			
		33-43	1-5	1.55-1.75	20-40	0.02-0.05	0.0-2.9	0.0-0.5	.10	.17			
		43-80	1-5	1.55-1.75	6.00-20	0.03-0.09	0.0-2.9	0.0-0.5	.10	.17			
Rosewood-----	3	0-8	5-18	1.00-1.35	2.00-6.00	0.16-0.18	0.0-2.9	3.0-8.0	.24	.24	3	3	86
		8-18	6-18	1.30-1.50	2.00-6.00	0.09-0.17	0.0-2.9	0.5-2.0	.24	.24			
		18-80	2-8	1.45-1.65	6.00-20	0.05-0.08	0.0-2.9	0.0-0.5	.15	.15			
Sandberg-----	2	0-12	2-10	1.20-1.40	6.00-20	0.10-0.12	0.0-2.9	1.0-3.0	.17	.17	5	2	134
		12-19	1-5	1.50-1.70	6.00-20	0.03-0.10	0.0-2.9	0.5-1.0	.05	.10			
		19-29	1-5	1.50-1.70	20-40	0.02-0.06	0.0-2.9	0.5-1.0	.05	.10			
		29-80	1-5	1.50-1.70	20-40	0.02-0.04	0.0-2.9	0.0-0.5	.05	.10			
I36A:													
Kittson-----	70	0-10	10-27	1.00-1.30	0.60-2.00	0.20-0.22	0.0-2.9	2.0-5.0	.24	.24	5	5	56
		10-17	15-25	1.35-1.55	0.60-2.00	0.12-0.19	0.0-2.9	0.2-2.0	.32	.32			
		17-36	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.1-1.0	.37	.37			
		36-60	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Roliss-----	12	0-14	18-27	1.10-1.50	0.20-2.00	0.17-0.24	3.0-5.9	3.0-8.0	.24	.24	5	4L	86
		14-20	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.5-2.0	.37	.37			
		20-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Hamerly-----	5	0-8	18-27	1.00-1.30	0.60-2.00	0.20-0.22	3.0-5.9	2.0-5.0	.24	.24	5	4L	86
		8-25	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.2-2.0	.37	.37			
		25-60	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Kratka-----	5	0-11	5-18	1.20-1.50	2.00-6.00	0.16-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		11-18	2-10	1.30-1.60	6.00-20	0.06-0.11	0.0-2.9	0.5-2.0	.17	.17			
		18-25	2-8	1.30-1.60	6.00-20	0.06-0.12	0.0-2.9	0.1-0.5	.17	.17			
		25-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Grimstad-----	3	0-9	10-18	1.15-1.45	2.00-6.00	0.14-0.18	0.0-2.9	2.0-5.0	.20	.20	5	3	86
		9-22	5-15	1.30-1.60	6.00-20	0.09-0.17	0.0-2.9	0.2-1.0	.20	.20			
		22-28	2-8	1.45-1.60	6.00-20	0.05-0.14	0.0-2.9	0.1-0.5	.20	.20			
		28-60	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			

Table 23.--Physical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Clay	Moist bulk density	Permea- bility	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
		In	Pct	g/cc	In/hr	In/in	Pct	Pct					
I36A: Strandquist-----	3	0-10	10-18	1.10-1.40	2.00-6.00	0.20-0.22	0.0-2.9	3.0-8.0	.24	.24	5	4L	86
		10-20	1-8	1.50-1.70	6.00-20	0.02-0.07	0.0-2.9	0.5-2.0	.10	.15			
		20-60	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Foxhome-----	2	0-10	5-15	1.15-1.45	2.00-6.00	0.13-0.15	0.0-2.9	2.0-5.0	.20	.20	5	3	86
		10-15	2-10	1.40-1.60	6.00-20	0.07-0.12	0.0-2.9	0.2-1.0	.15	.20			
		15-23	1-5	1.50-1.70	6.00-20	0.02-0.07	0.0-2.9	0.1-0.5	.05	.15			
		23-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
I37A: Kratka, depressional--	45	0-11	5-15	1.20-1.50	2.00-20	0.20-0.30	0.0-2.9	3.0-15	.20	.20	5	2	134
		11-18	2-10	1.30-1.60	6.00-20	0.06-0.11	0.0-2.9	0.5-2.0	.17	.17			
		18-25	2-8	1.30-1.60	6.00-20	0.06-0.12	0.0-2.9	0.1-0.5	.17	.17			
		25-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Strathcona, depressional-----	45	0-10	5-18	1.20-1.50	2.00-20	0.20-0.30	0.0-2.9	3.0-15	.20	.20	3	3	86
		10-17	10-18	1.30-1.50	2.00-6.00	0.09-0.17	0.0-2.9	0.5-2.0	.24	.24			
		17-28	2-8	1.35-1.60	6.00-20	0.05-0.12	0.0-2.9	0.1-0.5	.15	.15			
		28-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Northwood-----	5	0-9	0-0	0.10-0.40	0.20-6.00	0.35-0.48	---	50-95	.02	.02	4	2	134
		9-14	5-15	1.25-1.45	2.00-20	0.10-0.18	0.0-2.9	2.0-10	.15	.15			
		14-24	2-8	1.45-1.70	6.00-20	0.06-0.11	0.0-2.9	0.1-0.5	.15	.15			
		24-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Kratka-----	2	0-11	5-18	1.20-1.50	2.00-6.00	0.16-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		11-18	2-10	1.30-1.60	6.00-20	0.06-0.11	0.0-2.9	0.5-2.0	.17	.17			
		18-25	2-8	1.30-1.60	6.00-20	0.06-0.12	0.0-2.9	0.1-0.5	.17	.17			
		25-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Strathcona-----	2	0-10	5-18	1.20-1.50	2.00-20	0.13-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		10-17	10-18	1.30-1.50	2.00-6.00	0.09-0.17	0.0-2.9	0.5-2.0	.24	.24			
		17-28	2-8	1.35-1.60	6.00-20	0.05-0.12	0.0-2.9	0.1-0.5	.15	.15			
		28-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Roliss-----	1	0-14	18-27	1.10-1.50	0.20-2.00	0.17-0.24	3.0-5.9	3.0-8.0	.24	.24	5	4L	86
		14-20	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.5-2.0	.37	.37			
		20-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			

Table 23.--Physical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Clay	Moist bulk density	Permea- bility	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
I38A:		In	Pct	g/cc	In/hr	In/in	Pct	Pct					
Kratka-----	70	0-11	5-18	1.20-1.50	2.00-6.00	0.16-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		11-18	2-10	1.30-1.60	6.00-20	0.06-0.11	0.0-2.9	0.5-2.0	.17	.17			
		18-25	2-8	1.30-1.60	6.00-20	0.06-0.12	0.0-2.9	0.1-0.5	.17	.17			
		25-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Smiley-----	7	0-12	18-27	1.20-1.50	0.60-2.00	0.20-0.24	0.0-2.9	3.0-8.0	.24	.24	5	5	56
		12-19	18-35	1.35-1.65	0.60-2.00	0.15-0.19	3.0-5.9	0.5-2.0	.24	.24			
		19-42	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.2-1.0	.37	.37			
		42-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Foldahl-----	5	0-12	5-15	1.15-1.45	2.00-6.00	0.14-0.18	0.0-2.9	2.0-5.0	.20	.20	5	3	86
		12-30	1-10	1.45-1.60	6.00-20	0.07-0.12	0.0-2.9	0.2-1.0	.17	.17			
		30-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Kratka, very cobbly---	5	0-11	5-18	1.20-1.50	2.00-6.00	0.16-0.18	0.0-2.9	3.0-8.0	.15	.20	5	3	86
		11-18	2-10	1.30-1.60	6.00-20	0.06-0.11	0.0-2.9	0.5-2.0	.17	.17			
		18-25	2-8	1.30-1.60	6.00-20	0.06-0.12	0.0-2.9	0.1-0.5	.17	.17			
		25-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Strathcona-----	5	0-10	5-18	1.20-1.50	2.00-20	0.13-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		10-17	10-18	1.30-1.50	2.00-6.00	0.09-0.17	0.0-2.9	0.5-2.0	.24	.24			
		17-28	2-8	1.35-1.60	6.00-20	0.05-0.12	0.0-2.9	0.1-0.5	.15	.15			
		28-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Kratka, depressional--	3	0-11	5-15	1.20-1.50	2.00-20	0.20-0.30	0.0-2.9	3.0-15	.20	.20	5	2	134
		11-18	2-10	1.30-1.60	6.00-20	0.06-0.11	0.0-2.9	0.5-2.0	.17	.17			
		18-25	2-8	1.30-1.60	6.00-20	0.06-0.12	0.0-2.9	0.1-0.5	.17	.17			
		25-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Strandquist-----	3	0-10	10-18	1.10-1.40	2.00-6.00	0.20-0.22	0.0-2.9	3.0-8.0	.24	.24	5	4L	86
		10-20	1-8	1.50-1.70	6.00-20	0.02-0.07	0.0-2.9	0.5-2.0	.10	.15			
		20-60	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Linveltdt-----	2	0-9	5-15	1.15-1.45	2.00-6.00	0.14-0.18	0.0-2.9	2.0-5.0	.20	.20	5	3	86
		9-16	12-25	1.25-1.50	0.60-6.00	0.12-0.18	0.0-2.9	0.2-2.0	.28	.28			
		16-29	1-8	1.45-1.65	6.00-20	0.05-0.11	0.0-2.9	0.1-0.5	.15	.17			
		29-45	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.2-1.0	.37	.37			
		45-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			

Table 23.--Physical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Clay	Moist bulk density	Permea- bility	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
		In	Pct	g/cc	In/hr	In/in	Pct	Pct					
<b>I39A:</b>													
Linveldt-----	65	0-9	5-15	1.15-1.45	2.00-6.00	0.14-0.18	0.0-2.9	2.0-5.0	.20	.20	5	3	86
		9-16	12-25	1.25-1.50	0.60-6.00	0.12-0.18	0.0-2.9	0.2-2.0	.28	.28			
		16-29	1-8	1.45-1.65	6.00-20	0.05-0.11	0.0-2.9	0.1-0.5	.15	.17			
		29-45	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.2-1.0	.37	.37			
		45-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Kratka-----	14	0-11	5-18	1.20-1.50	2.00-6.00	0.16-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		11-18	2-10	1.30-1.60	6.00-20	0.06-0.11	0.0-2.9	0.5-2.0	.17	.17			
		18-25	2-8	1.30-1.60	6.00-20	0.06-0.12	0.0-2.9	0.1-0.5	.17	.17			
		25-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Reiner-----	10	0-7	5-15	1.10-1.35	2.00-6.00	0.16-0.18	0.0-2.9	2.0-5.0	.20	.24	5	3	86
		7-17	25-35	1.40-1.65	0.60-2.00	0.15-0.19	3.0-5.9	0.2-2.0	.32	.32			
		17-35	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.2-1.0	.37	.37			
		35-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Smiley-----	5	0-12	18-27	1.20-1.50	0.60-2.00	0.20-0.24	0.0-2.9	3.0-8.0	.24	.24	5	5	56
		12-19	18-35	1.35-1.65	0.60-2.00	0.15-0.19	3.0-5.9	0.5-2.0	.24	.24			
		19-42	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.2-1.0	.37	.37			
		42-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Eckvoll-----	3	0-9	2-10	1.20-1.40	6.00-20	0.10-0.12	0.0-2.9	0.5-3.0	.17	.17	5	2	134
		9-25	1-10	1.35-1.55	6.00-20	0.05-0.12	0.0-2.9	0.1-1.0	.15	.15			
		25-32	18-35	1.40-1.70	0.20-2.00	0.16-0.18	3.0-5.9	0.1-1.0	.37	.37			
		32-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Foldahl-----	2	0-12	5-15	1.15-1.45	2.00-6.00	0.14-0.18	0.0-2.9	2.0-5.0	.20	.20	5	3	86
		12-30	1-10	1.45-1.60	6.00-20	0.07-0.12	0.0-2.9	0.2-1.0	.17	.17			
		30-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Pelan-----	1	0-6	5-15	1.10-1.35	2.00-6.00	0.13-0.15	0.0-2.9	1.0-3.0	.20	.24	5	3	86
		6-9	1-10	1.35-1.55	6.00-20	0.05-0.12	0.0-2.9	0.2-1.0	.15	.15			
		9-14	15-25	1.45-1.65	6.00-20	0.03-0.11	0.0-2.9	0.2-1.0	.20	.24			
		14-20	1-5	1.50-1.70	6.00-20	0.02-0.07	0.0-2.9	0.0-0.5	.05	.15			
		20-60	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
<b>I40B:</b>													
Maddock-----	85	0-10	2-10	1.20-1.40	2.00-20	0.10-0.12	0.0-2.9	1.0-3.0	.17	.17	5	2	134
		10-14	1-8	1.30-1.50	2.00-20	0.05-0.12	0.0-2.9	0.2-1.0	.17	.17			
		14-60	1-8	1.45-1.65	2.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.17	.17			

Table 23.--Physical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Clay	Moist bulk density	Permea- bility	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
<b>I40B:</b>		<b>In</b>	<b>Pct</b>	<b>g/cc</b>	<b>In/hr</b>	<b>In/in</b>	<b>Pct</b>	<b>Pct</b>					
Flaming-----	5	0-12	2-10	1.20-1.40	6.00-20	0.10-0.12	0.0-2.9	2.0-4.0	.17	.17	5	2	134
		12-17	2-10	1.30-1.50	6.00-20	0.06-0.12	0.0-2.9	0.5-3.0	.17	.17			
		17-27	2-8	1.30-1.50	6.00-20	0.05-0.12	0.0-2.9	0.2-1.0	.17	.17			
		27-60	1-8	1.50-1.70	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.17	.17			
Sandberg-----	5	0-12	2-10	1.20-1.40	6.00-20	0.10-0.12	0.0-2.9	1.0-3.0	.17	.17	5	2	134
		12-19	1-5	1.50-1.70	6.00-20	0.03-0.10	0.0-2.9	0.5-1.0	.05	.10			
		19-29	1-5	1.50-1.70	20-40	0.02-0.06	0.0-2.9	0.5-1.0	.05	.10			
		29-80	1-5	1.50-1.70	20-40	0.02-0.04	0.0-2.9	0.0-0.5	.05	.10			
Halverson-----	3	0-10	2-10	1.20-1.40	2.00-20	0.10-0.12	0.0-2.9	1.0-3.0	.17	.17	5	2	134
		10-23	2-10	1.55-1.70	6.00-20	0.06-0.11	0.0-2.9	0.1-1.0	.17	.17			
		23-35	18-27	1.45-1.70	0.60-2.00	0.15-0.19	3.0-5.9	0.1-1.0	.28	.28			
		35-55	7-18	1.40-1.60	0.60-2.00	0.13-0.20	0.0-2.9	0.0-2.0	.37	.37			
		55-80	7-18	1.40-1.60	0.60-2.00	0.13-0.20	0.0-2.9	0.0-0.5	.37	.37			
Hamar-----	2	0-12	2-10	1.20-1.40	2.00-20	0.10-0.13	0.0-2.9	3.0-8.0	.17	.17	5	2	134
		12-17	2-10	1.35-1.55	2.00-20	0.06-0.12	0.0-2.9	0.5-2.0	.17	.17			
		17-40	1-8	1.45-1.65	2.00-20	0.06-0.10	0.0-2.9	0.0-0.5	.17	.17			
		40-47	2-10	1.30-1.50	2.00-20	0.10-0.13	0.0-2.9	1.0-4.0	.17	.17			
		47-60	1-8	1.45-1.65	2.00-20	0.06-0.10	0.0-2.9	0.0-0.5	.17	.17			
<b>I40F:</b>													
Maddock-----	90	0-10	2-10	1.20-1.40	2.00-20	0.10-0.12	0.0-2.9	1.0-3.0	.17	.17	5	2	134
		10-14	1-8	1.30-1.50	2.00-20	0.05-0.12	0.0-2.9	0.2-1.0	.17	.17			
		14-60	1-8	1.45-1.65	2.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.17	.17			
Flaming-----	5	0-12	2-10	1.20-1.40	6.00-20	0.10-0.12	0.0-2.9	2.0-4.0	.17	.17	5	2	134
		12-17	2-10	1.30-1.50	6.00-20	0.06-0.12	0.0-2.9	0.5-3.0	.17	.17			
		17-27	2-8	1.30-1.50	6.00-20	0.05-0.12	0.0-2.9	0.2-1.0	.17	.17			
		27-60	1-8	1.50-1.70	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.17	.17			
Sandberg-----	5	0-12	2-10	1.20-1.40	6.00-20	0.10-0.12	0.0-2.9	1.0-3.0	.17	.17	5	2	134
		12-19	1-5	1.50-1.70	6.00-20	0.03-0.10	0.0-2.9	0.5-1.0	.05	.10			
		19-29	1-5	1.50-1.70	20-40	0.02-0.06	0.0-2.9	0.5-1.0	.05	.10			
		29-80	1-5	1.50-1.70	20-40	0.02-0.04	0.0-2.9	0.0-0.5	.05	.10			
<b>I41A:</b>													
Markey-----	80	0-32	0-0	0.10-0.35	0.20-6.00	0.35-0.48	---	75-95	.02	.02	2	2	134
		32-60	2-8	1.40-1.65	6.00-20	0.03-0.10	0.0-2.9	0.0-0.5	.15	.15			
Deerwood-----	12	0-10	0-0	0.15-0.35	0.20-6.00	0.35-0.48	---	50-95	.02	.02	3	2	134
		10-12	2-15	1.25-1.45	2.00-20	0.09-0.17	0.0-2.9	2.0-10	.17	.17			
		12-60	1-8	1.50-1.70	6.00-20	0.02-0.10	0.0-2.9	0.0-0.5	.15	.17			

Table 23.--Physical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Clay	Moist bulk density	Permea- bility	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
		In	Pct	g/cc	In/hr	In/in	Pct	Pct					
<b>I41A:</b>													
Berner-----	2	0-28	0-0	0.10-0.35	0.20-6.00	0.35-0.48	---	75-95	.02	.02	2	2	134
		28-31	5-15	1.25-1.45	2.00-6.00	0.10-0.18	0.0-2.9	2.0-10	.17	.24			
		31-44	0-5	1.45-1.65	6.00-20	0.05-0.10	0.0-2.9	0.1-0.5	.05	.15			
		44-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Hamar-----	2	0-12	2-10	1.20-1.40	2.00-20	0.10-0.13	0.0-2.9	3.0-8.0	.17	.17	5	2	134
		12-17	2-10	1.35-1.55	2.00-20	0.06-0.12	0.0-2.9	0.5-2.0	.17	.17			
		17-40	1-8	1.45-1.65	2.00-20	0.06-0.10	0.0-2.9	0.0-0.5	.17	.17			
		40-47	2-10	1.30-1.50	2.00-20	0.10-0.13	0.0-2.9	1.0-4.0	.17	.17			
		47-60	1-8	1.45-1.65	2.00-20	0.06-0.10	0.0-2.9	0.0-0.5	.17	.17			
Seelyeville-----	2	0-10	0-0	0.10-0.25	0.20-6.00	0.35-0.48	---	75-99	.02	.02	3	2	134
		10-80	0-0	0.10-0.25	0.20-6.00	0.35-0.48	---	75-99	.02	.02			
Syrene-----	2	0-9	8-18	1.10-1.40	0.60-2.00	0.13-0.15	0.0-2.9	3.0-8.0	.20	.20	3	3	86
		9-17	10-25	1.30-1.50	2.00-6.00	0.12-0.19	0.0-2.9	0.5-2.0	.32	.32			
		17-27	1-5	1.50-1.70	6.00-20	0.02-0.04	0.0-2.9	0.0-0.5	.05	.10			
		27-60	1-5	1.50-1.70	6.00-20	0.02-0.04	0.0-2.9	0.0-0.5	.05	.10			
<b>I42A:</b>													
Markey, ponded-----	85	0-32	0-0	0.10-0.35	0.20-6.00	0.35-0.48	---	75-95	.02	.02	2	8	0
		32-60	0-10	1.40-1.65	6.00-20	0.03-0.08	0.0-2.9	0.0-0.5	.15	.15			
Markey-----	5	0-32	0-0	0.10-0.35	0.20-6.00	0.35-0.48	---	75-95	.02	.02	2	2	134
		32-60	2-8	1.40-1.65	6.00-20	0.03-0.10	0.0-2.9	0.0-0.5	.15	.15			
Deerwood-----	4	0-10	0-0	0.15-0.35	0.20-6.00	0.35-0.48	---	50-95	.02	.02	3	2	134
		10-12	2-15	1.25-1.45	2.00-20	0.09-0.17	0.0-2.9	2.0-10	.17	.17			
		12-60	1-8	1.50-1.70	6.00-20	0.02-0.10	0.0-2.9	0.0-0.5	.15	.17			
Seelyeville, ponded---	4	0-10	0-0	0.10-0.25	0.20-6.00	0.35-0.48	---	75-99	.02	.02	3	8	0
		10-80	0-0	0.10-0.25	0.20-6.00	0.35-0.48	---	75-99	.02	.02			
Hamar-----	1	0-12	2-10	1.20-1.40	2.00-20	0.10-0.13	0.0-2.9	3.0-8.0	.17	.17	5	2	134
		12-17	2-10	1.35-1.55	2.00-20	0.06-0.12	0.0-2.9	0.5-2.0	.17	.17			
		17-40	1-8	1.45-1.65	2.00-20	0.06-0.10	0.0-2.9	0.0-0.5	.17	.17			
		40-47	2-10	1.30-1.50	2.00-20	0.10-0.13	0.0-2.9	1.0-4.0	.17	.17			
		47-60	1-8	1.45-1.65	2.00-20	0.06-0.10	0.0-2.9	0.0-0.5	.17	.17			
Hangaard-----	1	0-10	8-18	1.10-1.40	2.00-6.00	0.10-0.15	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		10-15	5-15	1.10-1.45	6.00-20	0.07-0.11	0.0-2.9	1.0-3.0	.17	.17			
		15-80	1-5	1.50-1.70	6.00-40	0.02-0.04	0.0-2.9	0.0-0.5	.10	.15			

Table 23.--Physical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Clay	Moist bulk density	Permea- bility	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
<b>I43A:</b>		<b>In</b>	<b>Pct</b>	<b>g/cc</b>	<b>In/hr</b>	<b>In/in</b>	<b>Pct</b>	<b>Pct</b>					
Mavie-----	70	0-12	10-18	1.20-1.50	2.00-6.00	0.16-0.18	0.0-2.9	3.0-8.0	.20	.20	3	3	86
		12-18	10-25	1.35-1.55	0.60-2.00	0.12-0.19	0.0-2.9	0.5-2.0	.28	.28			
		18-39	1-10	1.40-1.65	6.00-20	0.03-0.06	0.0-2.9	0.0-0.5	.10	.15			
		39-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Vallers-----	10	0-12	18-27	1.10-1.35	0.60-2.00	0.20-0.22	0.0-2.9	3.0-8.0	.24	.24	5	4L	86
		12-21	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.5-2.0	.37	.37			
		21-60	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Strandquist-----	7	0-10	10-18	1.10-1.40	2.00-6.00	0.20-0.22	0.0-2.9	3.0-8.0	.24	.24	5	4L	86
		10-20	1-8	1.50-1.70	6.00-20	0.02-0.07	0.0-2.9	0.5-2.0	.10	.15			
		20-60	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Strathcona-----	5	0-10	5-18	1.20-1.50	2.00-20	0.13-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		10-17	10-18	1.30-1.50	2.00-6.00	0.09-0.17	0.0-2.9	0.5-2.0	.24	.24			
		17-28	2-8	1.35-1.60	6.00-20	0.05-0.12	0.0-2.9	0.1-0.5	.15	.15			
		28-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Strathcona, depressional-----	3	0-10	5-18	1.20-1.50	2.00-20	0.20-0.30	0.0-2.9	3.0-15	.20	.20	3	3	86
		10-17	10-18	1.30-1.50	2.00-6.00	0.09-0.17	0.0-2.9	0.5-2.0	.24	.24			
		17-28	2-8	1.35-1.60	6.00-20	0.05-0.12	0.0-2.9	0.1-0.5	.15	.15			
		28-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Foxhome-----	2	0-10	5-15	1.15-1.45	2.00-6.00	0.13-0.15	0.0-2.9	2.0-5.0	.20	.20	5	3	86
		10-15	2-10	1.40-1.60	6.00-20	0.07-0.12	0.0-2.9	0.2-1.0	.15	.20			
		15-23	1-5	1.50-1.70	6.00-20	0.02-0.07	0.0-2.9	0.1-0.5	.05	.15			
		23-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Karlsruhe-----	2	0-15	5-15	1.10-1.40	2.00-6.00	0.10-0.15	0.0-2.9	2.0-6.0	.20	.20	5	3	86
		15-30	2-12	1.20-1.60	2.00-20	0.09-0.14	0.0-2.9	0.5-2.0	.20	.20			
		30-60	0-5	1.30-1.60	6.00-40	0.02-0.07	0.0-2.9	0.0-0.5	.10	.15			
Grimstad-----	1	0-9	10-18	1.15-1.45	2.00-6.00	0.14-0.18	0.0-2.9	2.0-5.0	.20	.20	5	3	86
		9-22	5-15	1.30-1.60	6.00-20	0.09-0.17	0.0-2.9	0.2-1.0	.20	.20			
		22-28	2-8	1.45-1.60	6.00-20	0.05-0.14	0.0-2.9	0.1-0.5	.20	.20			
		28-60	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
<b>I44A:</b>													
Newfolden-----	75	0-7	10-27	1.00-1.30	0.60-2.00	0.20-0.22	0.0-2.9	2.0-5.0	.24	.24	5	5	56
		7-16	35-55	1.20-1.50	0.06-0.20	0.10-0.19	6.0-8.9	0.2-2.0	.32	.32			
		16-36	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.2-1.0	.37	.37			
		36-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			

Table 23.--Physical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Clay	Moist bulk density	Permea- bility	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
		In	Pct	g/cc	In/hr	In/in	Pct	Pct					
I44A: Smiley-----	12	0-12	18-27	1.20-1.50	0.60-2.00	0.20-0.24	0.0-2.9	3.0-8.0	.24	.24	5	5	56
		12-19	18-35	1.35-1.65	0.60-2.00	0.15-0.19	3.0-5.9	0.5-2.0	.24	.24			
		19-42	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.2-1.0	.37	.37			
		42-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Boash-----	8	0-9	27-40	1.20-1.45	0.06-0.20	0.17-0.19	6.0-8.9	3.0-8.0	.32	.32	5	4	86
		9-29	35-60	1.20-1.50	0.06-0.20	0.10-0.19	6.0-8.9	0.5-2.0	.32	.32			
		29-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Linveldt-----	4	0-9	5-15	1.15-1.45	2.00-6.00	0.14-0.18	0.0-2.9	2.0-5.0	.20	.20	5	3	86
		9-16	12-25	1.25-1.50	0.60-6.00	0.12-0.18	0.0-2.9	0.2-2.0	.28	.28			
		16-29	1-8	1.45-1.65	6.00-20	0.05-0.11	0.0-2.9	0.1-0.5	.15	.17			
		29-45	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.2-1.0	.37	.37			
		45-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Hapludolls-----	1	0-9	15-27	1.00-1.30	0.60-2.00	0.17-0.22	3.0-5.9	1.0-5.0	.28	.28	5	6	48
		9-60	15-35	1.20-1.50	0.60-2.00	0.14-0.20	0.0-2.9	0.0-0.5	.28	.28			
I45A: Northwood-----	75	0-9	0-0	0.10-0.40	0.20-6.00	0.35-0.48	---	50-95	.02	.02	4	2	134
		9-14	5-15	1.25-1.45	2.00-20	0.10-0.18	0.0-2.9	2.0-10	.15	.15			
		14-24	2-8	1.45-1.70	6.00-20	0.06-0.11	0.0-2.9	0.1-0.5	.15	.15			
		24-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Hamre-----	10	0-13	0-0	0.10-0.40	0.20-6.00	0.35-0.48	---	50-95	.02	.02	5	2	134
		13-18	18-35	1.25-1.50	0.20-2.00	0.17-0.22	3.0-5.9	2.0-10	.32	.32			
		18-71	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
		71-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Berner-----	5	0-28	0-0	0.10-0.35	0.20-6.00	0.35-0.48	---	75-95	.02	.02	2	2	134
		28-31	5-15	1.25-1.45	2.00-6.00	0.10-0.18	0.0-2.9	2.0-10	.17	.24			
		31-44	0-5	1.45-1.65	6.00-20	0.05-0.10	0.0-2.9	0.1-0.5	.05	.15			
		44-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Kratka-----	5	0-11	5-18	1.20-1.50	2.00-6.00	0.16-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		11-18	2-10	1.30-1.60	6.00-20	0.06-0.11	0.0-2.9	0.5-2.0	.17	.17			
		18-25	2-8	1.30-1.60	6.00-20	0.06-0.12	0.0-2.9	0.1-0.5	.17	.17			
		25-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Strandquist-----	3	0-10	10-18	1.10-1.40	2.00-6.00	0.20-0.22	0.0-2.9	3.0-8.0	.24	.24	5	4L	86
		10-20	1-8	1.50-1.70	6.00-20	0.02-0.07	0.0-2.9	0.5-2.0	.10	.15			
		20-60	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			

Table 23.--Physical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Clay	Moist bulk density	Permea- bility	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
I45A: Roliss-----	2	0-14	18-27	1.10-1.50	0.20-2.00	0.17-0.24	3.0-5.9	3.0-8.0	.24	.24	5	4L	86
		14-20	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.5-2.0	.37	.37			
		20-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
I46A: Pits-----	85	---	---	---	---	---	---	---	---	---	-	---	---
Udipsamments-----	10	0-14	2-10	1.30-1.50	2.00-20	0.05-0.10	0.0-2.9	0.1-0.5	.15	.15	5	1	220
		14-60	1-5	1.50-1.70	6.00-20	0.05-0.08	0.0-2.9	0.0-0.2	.10	.10			
		60-80	1-5	1.50-1.70	20-60	0.03-0.05	0.0-2.9	0.0-0.2	.05	.10			
Radium-----	2	0-14	2-8	1.20-1.40	6.00-20	0.06-0.12	0.0-2.9	1.0-3.0	.17	.17	5	2	134
		14-33	1-8	1.40-1.65	6.00-20	0.03-0.08	0.0-2.9	0.0-0.5	.10	.10			
		33-43	1-5	1.55-1.75	20-40	0.02-0.05	0.0-2.9	0.0-0.5	.10	.17			
		43-80	1-5	1.55-1.75	6.00-20	0.03-0.09	0.0-2.9	0.0-0.5	.10	.17			
Maddock-----	1	0-10	2-10	1.20-1.40	2.00-20	0.10-0.12	0.0-2.9	1.0-3.0	.17	.17	5	2	134
		10-14	1-8	1.30-1.50	2.00-20	0.05-0.12	0.0-2.9	0.2-1.0	.17	.17			
		14-60	1-8	1.45-1.65	2.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.17	.17			
Marquette-----	1	0-6	1-10	1.40-1.60	6.00-20	0.10-0.14	0.0-2.9	1.0-3.0	.17	.17	5	2	134
		6-9	1-10	1.30-1.55	2.00-20	0.10-0.14	0.0-2.9	0.5-1.0	.20	.20			
		9-14	5-18	1.50-1.70	2.00-6.00	0.10-0.16	0.0-2.9	0.5-1.0	.15	.20			
		14-60	1-5	1.50-1.70	20-60	0.02-0.04	0.0-2.9	0.0-0.5	.05	.15			
Sandberg-----	1	0-12	2-10	1.20-1.40	6.00-20	0.10-0.12	0.0-2.9	1.0-3.0	.17	.17	5	2	134
		12-19	1-5	1.50-1.70	6.00-20	0.03-0.10	0.0-2.9	0.5-1.0	.05	.10			
		19-29	1-5	1.50-1.70	20-40	0.02-0.06	0.0-2.9	0.5-1.0	.05	.10			
		29-80	1-5	1.50-1.70	20-40	0.02-0.04	0.0-2.9	0.0-0.5	.05	.10			
I47A: Poppleton-----	75	0-6	2-10	1.20-1.40	6.00-20	0.08-0.10	0.0-2.9	0.5-2.0	.15	.15	5	1	250
		6-9	1-8	1.35-1.55	6.00-20	0.05-0.12	0.0-2.9	0.1-0.5	.15	.15			
		9-40	1-8	1.35-1.55	6.00-20	0.05-0.12	0.0-2.9	0.1-0.5	.15	.15			
		40-60	1-8	1.45-1.65	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.15	.15			
Flaming-----	12	0-12	2-10	1.20-1.40	6.00-20	0.10-0.12	0.0-2.9	2.0-4.0	.17	.17	5	2	134
		12-17	2-10	1.30-1.50	6.00-20	0.06-0.12	0.0-2.9	0.5-3.0	.17	.17			
		17-27	2-8	1.30-1.50	6.00-20	0.05-0.12	0.0-2.9	0.2-1.0	.17	.17			
		27-60	1-8	1.50-1.70	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.17	.17			

Table 23.--Physical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Clay	Moist bulk density	Permea- bility	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
		In	Pct	g/cc	In/hr	In/in	Pct	Pct					
<b>I47A:</b>													
Garborg-----	5	0-12	2-10	1.20-1.40	6.00-20	0.10-0.13	0.0-2.9	2.0-6.0	.17	.17	5	2	134
		12-41	2-10	1.35-1.55	2.00-20	0.06-0.12	0.0-2.9	0.5-2.0	.17	.17			
		41-59	1-8	1.45-1.65	2.00-20	0.06-0.10	0.0-2.9	0.0-0.5	.17	.17			
		59-80	1-8	1.45-1.65	2.00-20	0.06-0.10	0.0-2.9	0.0-0.5	.17	.17			
Hamar-----	3	0-12	2-10	1.20-1.40	2.00-20	0.10-0.13	0.0-2.9	3.0-8.0	.17	.17	5	2	134
		12-17	2-10	1.35-1.55	2.00-20	0.06-0.12	0.0-2.9	0.5-2.0	.17	.17			
		17-40	1-8	1.45-1.65	2.00-20	0.06-0.10	0.0-2.9	0.0-0.5	.17	.17			
		40-47	2-10	1.30-1.50	2.00-20	0.10-0.13	0.0-2.9	1.0-4.0	.17	.17			
		47-60	1-8	1.45-1.65	2.00-20	0.06-0.10	0.0-2.9	0.0-0.5	.17	.17			
Radium-----	2	0-14	2-8	1.20-1.40	6.00-20	0.06-0.12	0.0-2.9	1.0-3.0	.17	.17	5	2	134
		14-33	1-8	1.40-1.65	6.00-20	0.03-0.08	0.0-2.9	0.0-0.5	.10	.10			
		33-43	1-5	1.55-1.75	20-40	0.02-0.05	0.0-2.9	0.0-0.5	.10	.17			
		43-80	1-5	1.55-1.75	6.00-20	0.03-0.09	0.0-2.9	0.0-0.5	.10	.17			
Ulen-----	2	0-9	2-10	1.20-1.40	6.00-20	0.10-0.12	0.0-2.9	2.0-5.0	.17	.17	5	2	134
		9-42	5-15	1.30-1.60	2.00-6.00	0.09-0.17	0.0-2.9	0.2-1.0	.24	.24			
		42-60	2-8	1.45-1.65	6.00-20	0.05-0.08	0.0-2.9	0.0-0.5	.15	.15			
Maddock-----	1	0-10	2-10	1.20-1.40	2.00-20	0.10-0.12	0.0-2.9	1.0-3.0	.17	.17	5	2	134
		10-14	1-8	1.30-1.50	2.00-20	0.05-0.12	0.0-2.9	0.2-1.0	.17	.17			
		14-60	1-8	1.45-1.65	2.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.17	.17			
<b>I48A:</b>													
Radium-----	75	0-14	2-8	1.20-1.40	6.00-20	0.06-0.12	0.0-2.9	1.0-3.0	.17	.17	5	2	134
		14-33	1-8	1.40-1.65	6.00-20	0.03-0.08	0.0-2.9	0.0-0.5	.10	.10			
		33-43	1-5	1.55-1.75	20-40	0.02-0.05	0.0-2.9	0.0-0.5	.10	.17			
		43-80	1-5	1.55-1.75	6.00-20	0.03-0.09	0.0-2.9	0.0-0.5	.10	.17			
Sandberg-----	7	0-12	2-10	1.20-1.40	6.00-20	0.10-0.12	0.0-2.9	1.0-3.0	.17	.17	5	2	134
		12-19	1-5	1.50-1.70	6.00-20	0.03-0.10	0.0-2.9	0.5-1.0	.05	.10			
		19-29	1-5	1.50-1.70	20-40	0.02-0.06	0.0-2.9	0.5-1.0	.05	.10			
		29-80	1-5	1.50-1.70	20-40	0.02-0.04	0.0-2.9	0.0-0.5	.05	.10			
Oylen-----	5	0-10	5-12	1.50-1.70	2.00-6.00	0.12-0.16	0.0-2.9	2.0-4.0	.20	.20	3	3	86
		10-18	7-18	1.60-1.70	0.60-2.00	0.12-0.18	0.0-2.9	0.5-2.0	.24	.24			
		18-38	2-5	1.45-1.60	6.00-20	0.03-0.08	0.0-2.9	0.0-0.5	.10	.10			
		38-80	0-5	1.45-1.60	6.00-20	0.03-0.07	0.0-2.9	0.0-0.5	.05	.10			
Flaming-----	4	0-12	2-10	1.20-1.40	6.00-20	0.10-0.12	0.0-2.9	2.0-4.0	.17	.17	5	2	134
		12-17	2-10	1.30-1.50	6.00-20	0.06-0.12	0.0-2.9	0.5-3.0	.17	.17			
		17-27	2-8	1.30-1.50	6.00-20	0.05-0.12	0.0-2.9	0.2-1.0	.17	.17			
		27-60	1-8	1.50-1.70	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.17	.17			

Table 23.--Physical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Clay	Moist bulk density	Permea- bility	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
		In	Pct	g/cc	In/hr	In/in	Pct	Pct					
I48A: Garborg-----	3	0-12	2-10	1.20-1.40	6.00-20	0.10-0.13	0.0-2.9	2.0-6.0	.17	.17	5	2	134
		12-41	2-10	1.35-1.55	2.00-20	0.06-0.12	0.0-2.9	0.5-2.0	.17	.17			
		41-59	1-8	1.45-1.65	2.00-20	0.06-0.10	0.0-2.9	0.0-0.5	.17	.17			
		59-80	1-8	1.45-1.65	2.00-20	0.06-0.10	0.0-2.9	0.0-0.5	.17	.17			
Hangaard-----	3	0-10	8-18	1.10-1.40	2.00-6.00	0.10-0.15	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		10-15	5-15	1.10-1.45	6.00-20	0.07-0.11	0.0-2.9	1.0-3.0	.17	.17			
		15-80	1-5	1.50-1.70	6.00-40	0.02-0.04	0.0-2.9	0.0-0.5	.10	.15			
Hamar-----	2	0-12	2-10	1.20-1.40	2.00-20	0.10-0.13	0.0-2.9	3.0-8.0	.17	.17	5	2	134
		12-17	2-10	1.35-1.55	2.00-20	0.06-0.12	0.0-2.9	0.5-2.0	.17	.17			
		17-40	1-8	1.45-1.65	2.00-20	0.06-0.10	0.0-2.9	0.0-0.5	.17	.17			
		40-47	2-10	1.30-1.50	2.00-20	0.10-0.13	0.0-2.9	1.0-4.0	.17	.17			
		47-60	1-8	1.45-1.65	2.00-20	0.06-0.10	0.0-2.9	0.0-0.5	.17	.17			
Poppleton-----	1	0-6	2-10	1.20-1.40	6.00-20	0.08-0.10	0.0-2.9	0.5-2.0	.15	.15	5	1	250
		6-9	1-8	1.35-1.55	6.00-20	0.05-0.12	0.0-2.9	0.1-0.5	.15	.15			
		9-40	1-8	1.35-1.55	6.00-20	0.05-0.12	0.0-2.9	0.1-0.5	.15	.15			
		40-60	1-8	1.45-1.65	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.15	.15			
I49A: Rauville-----	80	0-27	27-35	1.00-1.25	0.20-2.00	0.18-0.25	3.0-5.9	4.0-15	.28	.28	5	4L	86
		27-45	20-35	1.10-1.30	0.20-2.00	0.17-0.22	3.0-5.9	1.0-4.0	.28	.28			
		45-60	1-30	1.20-1.65	0.60-20	0.04-0.20	0.0-2.9	0.1-2.0	.17	.20			
Fluvaquents-----	12	0-16	5-15	1.20-1.50	2.00-20	0.16-0.24	0.0-2.9	3.0-10	.20	.20	5	5	56
		16-80	1-27	1.40-1.65	0.60-20	0.04-0.20	0.0-2.9	0.5-3.0	.17	.20			
Water-----	5	---	---	---	---	---	---	---	---	---	-	---	---
Lamoure-----	3	0-27	27-35	1.15-1.25	0.20-1.98	0.19-0.22	3.0-5.9	4.0-8.0	.28	.28	5	4L	86
		27-43	20-35	1.10-1.35	0.20-1.98	0.17-0.20	3.0-5.9	1.0-4.0	.28	.28			
		43-52	20-35	1.20-1.35	0.20-1.98	0.17-0.20	3.0-5.9	1.0-5.0	.43	.43			
		52-60	1-35	1.40-1.65	0.60-20	0.04-0.20	0.0-2.9	0.0-2.0	.17	.20			
I50A: Reiner-----	70	0-7	5-15	1.10-1.35	2.00-6.00	0.16-0.18	0.0-2.9	2.0-5.0	.20	.20	5	3	86
		7-17	25-35	1.40-1.65	0.60-2.00	0.15-0.19	3.0-5.9	0.2-2.0	.32	.32			
		17-35	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.2-1.0	.37	.37			
		35-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			

Table 23.--Physical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Clay	Moist bulk density	Permea- bility	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
		In	Pct	g/cc	In/hr	In/in	Pct	Pct					
I50A: Smiley-----	12	0-12	18-27	1.20-1.50	0.60-2.00	0.20-0.24	0.0-2.9	3.0-8.0	.24	.24	5	5	56
		12-19	18-35	1.35-1.65	0.60-2.00	0.15-0.19	3.0-5.9	0.5-2.0	.24	.24			
		19-42	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.2-1.0	.37	.37			
		42-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Reiner, very cobbly---	7	0-7	5-15	1.10-1.35	2.00-6.00	0.16-0.18	0.0-2.9	2.0-5.0	.17	.20	5	3	86
		7-17	25-35	1.40-1.65	0.60-2.00	0.15-0.19	3.0-5.9	0.2-2.0	.32	.32			
		17-35	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.2-1.0	.37	.37			
		35-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Linveltdt-----	5	0-9	5-15	1.15-1.45	2.00-6.00	0.14-0.18	0.0-2.9	2.0-5.0	.20	.20	5	3	86
		9-16	12-25	1.25-1.50	0.60-6.00	0.12-0.18	0.0-2.9	0.2-2.0	.28	.28			
		16-29	1-8	1.45-1.65	6.00-20	0.05-0.11	0.0-2.9	0.1-0.5	.15	.17			
		29-45	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.2-1.0	.37	.37			
		45-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Eckvoll-----	3	0-9	2-10	1.20-1.40	6.00-20	0.10-0.12	0.0-2.9	0.5-3.0	.17	.17	5	2	134
		9-25	1-10	1.35-1.55	6.00-20	0.05-0.12	0.0-2.9	0.1-1.0	.15	.15			
		25-32	18-35	1.40-1.70	0.20-2.00	0.16-0.18	3.0-5.9	0.1-1.0	.37	.37			
		32-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Kratka-----	3	0-11	5-18	1.20-1.50	2.00-6.00	0.16-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		11-18	2-10	1.30-1.60	6.00-20	0.06-0.11	0.0-2.9	0.5-2.0	.17	.17			
		18-25	2-8	1.30-1.60	6.00-20	0.06-0.12	0.0-2.9	0.1-0.5	.17	.17			
		25-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
I51A: Reiner-----	65	0-7	2-10	1.20-1.40	6.00-20	0.10-0.13	0.0-2.9	1.0-3.0	.17	.17	5	2	134
		7-17	25-35	1.40-1.65	0.60-2.00	0.15-0.19	3.0-5.9	0.2-2.0	.32	.32			
		17-35	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.2-1.0	.37	.37			
		35-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Smiley-----	9	0-12	18-27	1.20-1.50	0.60-2.00	0.20-0.24	0.0-2.9	3.0-8.0	.24	.24	5	5	56
		12-19	18-35	1.35-1.65	0.60-2.00	0.15-0.19	3.0-5.9	0.5-2.0	.24	.24			
		19-42	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.2-1.0	.37	.37			
		42-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Reiner fine sandy loam	8	0-7	5-15	1.10-1.35	2.00-6.00	0.16-0.18	0.0-2.9	2.0-5.0	.20	.20	5	3	86
		7-17	25-35	1.40-1.65	0.60-2.00	0.15-0.19	3.0-5.9	0.2-2.0	.32	.32			
		17-35	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.2-1.0	.37	.37			
		35-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			

Table 23.--Physical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Clay	Moist bulk density	Permea- bility	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
I51A:		In	Pct	g/cc	In/hr	In/in	Pct	Pct					
Linveldt-----	7	0-9	5-15	1.15-1.45	2.00-6.00	0.14-0.18	0.0-2.9	2.0-5.0	.20	.20	5	3	86
		9-16	12-25	1.25-1.50	0.60-6.00	0.12-0.18	0.0-2.9	0.2-2.0	.28	.28			
		16-29	1-8	1.45-1.65	6.00-20	0.05-0.11	0.0-2.9	0.1-0.5	.15	.17			
		29-45	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.2-1.0	.37	.37			
		45-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Kratka-----	5	0-11	5-18	1.20-1.50	2.00-6.00	0.16-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		11-18	2-10	1.30-1.60	6.00-20	0.06-0.11	0.0-2.9	0.5-2.0	.17	.17			
		18-25	2-8	1.30-1.60	6.00-20	0.06-0.12	0.0-2.9	0.1-0.5	.17	.17			
		25-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Eckvoll-----	3	0-9	2-10	1.20-1.40	6.00-20	0.10-0.12	0.0-2.9	0.5-3.0	.17	.17	5	2	134
		9-25	1-10	1.35-1.55	6.00-20	0.05-0.12	0.0-2.9	0.1-1.0	.15	.15			
		25-32	18-35	1.40-1.70	0.20-2.00	0.16-0.18	3.0-5.9	0.1-1.0	.37	.37			
		32-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Reiner, very cobbly---	3	0-7	5-15	1.10-1.35	2.00-6.00	0.16-0.18	0.0-2.9	2.0-5.0	.17	.20	5	3	86
		7-17	25-35	1.40-1.65	0.60-2.00	0.15-0.19	3.0-5.9	0.2-2.0	.32	.32			
		17-35	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.2-1.0	.37	.37			
		35-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
I52A:													
Reis-----	55	0-9	40-60	1.10-1.30	0.06-0.20	0.13-0.17	6.0-8.9	3.0-8.0	.28	.28	5	4	86
		9-17	40-60	1.20-1.50	0.06-0.20	0.13-0.17	6.0-8.9	0.5-8.0	.32	.32			
		17-33	40-60	1.20-1.50	0.06-0.20	0.13-0.17	6.0-8.9	0.5-2.0	.32	.32			
		33-42	40-60	1.30-1.60	0.06-0.20	0.10-0.16	6.0-8.9	0.2-1.0	.32	.32			
		42-60	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
		60-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Clearwater-----	30	0-8	40-60	1.10-1.30	0.06-0.20	0.13-0.17	6.0-8.9	3.0-8.0	.28	.28	5	4	86
		8-35	35-60	1.20-1.50	0.06-0.20	0.10-0.19	6.0-8.9	0.5-2.0	.32	.32			
		35-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Clearwater, very cobbly-----	5	0-8	40-60	1.10-1.30	0.06-0.20	0.13-0.17	6.0-8.9	3.0-8.0	.24	.28	5	4	86
		8-35	35-60	1.20-1.50	0.06-0.20	0.10-0.19	6.0-8.9	0.5-2.0	.32	.32			
		35-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Clearwater, depressional-----	3	0-8	27-35	1.20-1.45	0.20-2.00	0.17-0.30	3.0-5.9	3.0-15	.24	.24	5	6	48
		8-35	35-60	1.20-1.50	0.06-0.20	0.10-0.19	6.0-8.9	1.0-3.0	.32	.32			
		35-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			

Table 23.--Physical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Clay	Moist bulk density	Permea- bility	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
		In	Pct	g/cc	In/hr	In/in	Pct	Pct					
I52A:													
Espelie-----	3	0-9	5-18	1.20-1.45	2.00-6.00	0.13-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		9-24	3-10	1.35-1.60	2.00-20	0.06-0.11	0.0-2.9	0.5-1.0	.17	.17			
		24-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Hattie-----	3	0-8	40-60	1.10-1.30	0.06-0.20	0.13-0.17	6.0-8.9	2.0-5.0	.28	.28	5	4	86
		8-22	35-60	1.25-1.45	0.06-0.20	0.10-0.19	6.0-8.9	0.2-2.0	.28	.28			
		22-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Wyandotte-----	1	0-8	27-30	1.20-1.45	0.60-2.00	0.14-0.19	0.0-2.9	3.0-8.0	.32	.32	5	4L	86
		8-15	18-25	1.25-1.50	0.60-2.00	0.14-0.18	0.0-2.9	0.2-2.0	.32	.32			
		15-34	1-5	1.40-1.70	6.00-20	0.02-0.07	0.0-2.9	0.1-0.5	.10	.15			
		34-60	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
I53A:													
Roliss-----	75	0-14	18-27	1.10-1.50	0.20-2.00	0.17-0.24	3.0-5.9	3.0-8.0	.24	.24	5	4L	86
		14-20	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.5-2.0	.37	.37			
		20-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Kratka-----	8	0-11	5-18	1.20-1.50	2.00-6.00	0.16-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		11-18	2-10	1.30-1.60	6.00-20	0.06-0.11	0.0-2.9	0.5-2.0	.17	.17			
		18-25	2-8	1.30-1.60	6.00-20	0.06-0.12	0.0-2.9	0.1-0.5	.17	.17			
		25-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Roliss, very cobbly--	7	0-14	18-27	1.10-1.50	0.20-2.00	0.17-0.24	3.0-5.9	3.0-8.0	.20	.24	5	4L	86
		14-20	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.5-2.0	.37	.37			
		20-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Kittson-----	5	0-10	10-27	1.00-1.30	0.60-2.00	0.20-0.22	0.0-2.9	2.0-5.0	.24	.24	5	5	56
		10-17	15-25	1.35-1.55	0.60-2.00	0.12-0.19	0.0-2.9	0.2-2.0	.32	.32			
		17-36	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.1-1.0	.37	.37			
		36-60	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Roliss, depressional--	3	0-14	15-27	1.10-1.40	0.20-2.00	0.20-0.25	3.0-5.9	3.0-15	.24	.24	5	6	48
		14-20	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	1.0-3.0	.37	.37			
		20-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Smiley-----	2	0-12	18-27	1.20-1.50	0.60-2.00	0.20-0.24	0.0-2.9	3.0-8.0	.24	.24	5	5	56
		12-19	18-35	1.35-1.65	0.60-2.00	0.15-0.19	3.0-5.9	0.5-2.0	.24	.24			
		19-42	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.2-1.0	.37	.37			
		42-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			

Table 23.--Physical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Clay	Moist bulk density	Permea- bility	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
I54A: Roliss, depressional--	80	0-14	15-27	1.10-1.40	0.20-2.00	0.20-0.25	3.0-5.9	3.0-15	.24	.24	5	6	48
		14-20	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	1.0-3.0	.37	.37			
		20-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Roliss-----	12	0-14	18-27	1.10-1.50	0.20-2.00	0.17-0.24	3.0-5.9	3.0-8.0	.24	.24	5	4L	86
		14-20	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.5-2.0	.37	.37			
		20-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Hamre-----	5	0-13	0-0	0.10-0.40	0.20-6.00	0.35-0.48	---	50-95	.02	.02	5	2	134
		13-18	18-35	1.25-1.50	0.20-2.00	0.17-0.22	3.0-5.9	2.0-10	.32	.32			
		18-71	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
		71-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Kratka-----	3	0-11	5-18	1.20-1.50	2.00-6.00	0.16-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		11-18	2-10	1.30-1.60	6.00-20	0.06-0.11	0.0-2.9	0.5-2.0	.17	.17			
		18-25	2-8	1.30-1.60	6.00-20	0.06-0.12	0.0-2.9	0.1-0.5	.17	.17			
		25-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
I55A: Rosewood-----	75	0-8	5-18	1.00-1.35	2.00-6.00	0.16-0.18	0.0-2.9	3.0-8.0	.24	.24	3	3	86
		8-18	6-18	1.30-1.50	2.00-6.00	0.09-0.17	0.0-2.9	0.5-2.0	.24	.24			
		18-80	2-8	1.45-1.65	6.00-20	0.05-0.08	0.0-2.9	0.0-0.5	.15	.15			
Ulen-----	10	0-9	8-18	1.15-1.45	2.00-6.00	0.13-0.18	0.0-2.9	2.0-5.0	.20	.20	3	3	86
		9-42	5-15	1.30-1.60	2.00-6.00	0.09-0.17	0.0-2.9	0.2-1.0	.24	.24			
		42-60	2-8	1.45-1.65	6.00-20	0.05-0.08	0.0-2.9	0.0-0.5	.15	.15			
Hamar-----	6	0-12	2-10	1.20-1.40	2.00-20	0.10-0.13	0.0-2.9	3.0-8.0	.17	.17	5	2	134
		12-17	2-10	1.35-1.55	2.00-20	0.06-0.12	0.0-2.9	0.5-2.0	.17	.17			
		17-40	1-8	1.45-1.65	2.00-20	0.06-0.10	0.0-2.9	0.0-0.5	.17	.17			
		40-47	2-10	1.30-1.50	2.00-20	0.10-0.13	0.0-2.9	1.0-4.0	.17	.17			
		47-60	1-8	1.45-1.65	2.00-20	0.06-0.10	0.0-2.9	0.0-0.5	.17	.17			
Rosewood, depressional	3	0-8	5-18	1.00-1.35	2.00-6.00	0.20-0.30	0.0-2.9	3.0-15	.20	.20	3	3	86
		8-18	6-18	1.30-1.50	2.00-6.00	0.09-0.17	0.0-2.9	0.5-2.0	.24	.24			
		18-80	2-8	1.45-1.65	6.00-20	0.05-0.08	0.0-2.9	0.0-0.5	.15	.15			
Syrene-----	3	0-9	8-18	1.10-1.40	0.60-2.00	0.13-0.15	0.0-2.9	3.0-8.0	.20	.20	3	3	86
		9-17	10-25	1.30-1.50	2.00-6.00	0.12-0.19	0.0-2.9	0.5-2.0	.32	.32			
		17-27	1-5	1.50-1.70	6.00-20	0.02-0.04	0.0-2.9	0.0-0.5	.05	.10			
		27-60	1-5	1.50-1.70	6.00-20	0.02-0.04	0.0-2.9	0.0-0.5	.05	.10			

Table 23.--Physical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Clay	Moist bulk density	Permea- bility	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
		In	Pct	g/cc	In/hr	In/in	Pct	Pct					
I55A: Karlsruhe-----	1	0-15	5-15	1.10-1.40	2.00-6.00	0.10-0.15	0.0-2.9	2.0-6.0	.20	.20	5	3	86
		15-30	2-12	1.20-1.60	2.00-20	0.09-0.14	0.0-2.9	0.5-2.0	.20	.20			
		30-60	0-5	1.30-1.60	6.00-40	0.02-0.07	0.0-2.9	0.0-0.5	.10	.15			
Strathcona-----	1	0-10	5-18	1.20-1.50	2.00-20	0.13-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		10-17	10-18	1.30-1.50	2.00-6.00	0.09-0.17	0.0-2.9	0.5-2.0	.24	.24			
		17-28	2-8	1.35-1.60	6.00-20	0.05-0.12	0.0-2.9	0.1-0.5	.15	.15			
		28-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Thiefriever-----	1	0-12	8-18	1.20-1.45	2.00-6.00	0.13-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		12-23	10-18	1.30-1.50	2.00-6.00	0.09-0.17	0.0-2.9	0.5-2.0	.24	.24			
		23-32	2-8	1.45-1.70	6.00-20	0.06-0.11	0.0-2.9	0.1-0.5	.17	.17			
		32-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
I56A: Rosewood-----	50	0-8	5-18	1.00-1.35	2.00-6.00	0.16-0.18	0.0-2.9	3.0-8.0	.24	.24	3	3	86
		8-18	6-18	1.30-1.50	2.00-6.00	0.09-0.17	0.0-2.9	0.5-2.0	.24	.24			
		18-80	2-8	1.45-1.65	6.00-20	0.05-0.08	0.0-2.9	0.0-0.5	.15	.15			
Venlo-----	40	0-13	5-10	1.20-1.30	6.00-20	0.13-0.18	0.0-2.9	3.0-15	.20	.20	5	3	86
		13-60	1-8	1.45-1.65	2.00-20	0.06-0.10	0.0-2.9	0.0-0.5	.17	.17			
Deerwood-----	3	0-10	0-0	0.15-0.35	0.20-6.00	0.35-0.48	---	50-95	.02	.02	3	2	134
		10-12	2-15	1.25-1.45	2.00-20	0.09-0.17	0.0-2.9	2.0-10	.17	.17			
		12-60	1-8	1.50-1.70	6.00-20	0.02-0.10	0.0-2.9	0.0-0.5	.15	.17			
Syrene-----	3	0-9	8-18	1.10-1.40	0.60-2.00	0.13-0.15	0.0-2.9	3.0-8.0	.20	.20	3	3	86
		9-17	10-25	1.30-1.50	2.00-6.00	0.12-0.19	0.0-2.9	0.5-2.0	.32	.32			
		17-27	1-5	1.50-1.70	6.00-20	0.02-0.04	0.0-2.9	0.0-0.5	.05	.10			
		27-60	1-5	1.50-1.70	6.00-20	0.02-0.04	0.0-2.9	0.0-0.5	.05	.10			
Ulen-----	2	0-9	2-10	1.20-1.40	6.00-20	0.10-0.12	0.0-2.9	2.0-5.0	.17	.17	5	2	134
		9-42	5-15	1.30-1.60	2.00-6.00	0.09-0.17	0.0-2.9	0.2-1.0	.24	.24			
		42-60	2-8	1.45-1.65	6.00-20	0.05-0.08	0.0-2.9	0.0-0.5	.15	.15			
Strathcona-----	1	0-10	5-18	1.20-1.50	2.00-20	0.13-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		10-17	10-18	1.30-1.50	2.00-6.00	0.09-0.17	0.0-2.9	0.5-2.0	.24	.24			
		17-28	2-8	1.35-1.60	6.00-20	0.05-0.12	0.0-2.9	0.1-0.5	.15	.15			
		28-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Thiefriever-----	1	0-12	8-18	1.20-1.45	2.00-6.00	0.13-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		12-23	10-18	1.30-1.50	2.00-6.00	0.09-0.17	0.0-2.9	0.5-2.0	.24	.24			
		23-32	2-8	1.45-1.70	6.00-20	0.06-0.11	0.0-2.9	0.1-0.5	.17	.17			
		32-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			

Table 23.--Physical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Clay	Moist bulk density	Permea- bility	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
I57B:		In	Pct	g/cc	In/hr	In/in	Pct	Pct					
Sandberg-----	50	0-12	2-10	1.20-1.40	6.00-20	0.10-0.12	0.0-2.9	1.0-3.0	.17	.17	5	2	134
		12-19	1-5	1.50-1.70	6.00-20	0.03-0.10	0.0-2.9	0.5-1.0	.05	.10			
		19-29	1-5	1.50-1.70	20-40	0.02-0.06	0.0-2.9	0.5-1.0	.05	.10			
		29-80	1-5	1.50-1.70	20-40	0.02-0.04	0.0-2.9	0.0-0.5	.05	.10			
Radium-----	25	0-14	2-8	1.20-1.40	6.00-20	0.06-0.12	0.0-2.9	1.0-3.0	.17	.17	5	2	134
		14-33	1-8	1.40-1.65	6.00-20	0.03-0.08	0.0-2.9	0.0-0.5	.10	.10			
		33-43	1-5	1.55-1.75	20-40	0.02-0.05	0.0-2.9	0.0-0.5	.10	.17			
		43-80	1-5	1.55-1.75	6.00-20	0.03-0.09	0.0-2.9	0.0-0.5	.10	.17			
Sioux-----	8	0-5	10-18	1.25-1.40	2.00-6.00	0.11-0.15	0.0-2.9	1.0-3.0	.20	.20	5	3	86
		5-8	1-10	1.20-1.50	2.00-6.00	0.10-0.15	0.0-2.9	0.5-2.0	.15	.20			
		8-60	1-10	1.60-1.70	6.00-60	0.03-0.06	0.0-2.9	0.0-0.5	.10	.15			
Oylen-----	7	0-10	5-12	1.50-1.70	2.00-6.00	0.12-0.16	0.0-2.9	2.0-4.0	.20	.20	3	3	86
		10-18	7-18	1.60-1.70	0.60-2.00	0.12-0.18	0.0-2.9	0.5-2.0	.24	.24			
		18-38	2-5	1.45-1.60	6.00-20	0.03-0.08	0.0-2.9	0.0-0.5	.10	.10			
		38-80	0-5	1.45-1.60	6.00-20	0.03-0.07	0.0-2.9	0.0-0.5	.05	.10			
Flaming-----	5	0-12	2-10	1.20-1.40	6.00-20	0.10-0.12	0.0-2.9	2.0-4.0	.17	.17	5	2	134
		12-17	2-10	1.30-1.50	6.00-20	0.06-0.12	0.0-2.9	0.5-3.0	.17	.17			
		17-27	2-8	1.30-1.50	6.00-20	0.05-0.12	0.0-2.9	0.2-1.0	.17	.17			
		27-60	1-8	1.50-1.70	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.17	.17			
Garborg-----	5	0-12	2-10	1.20-1.40	6.00-20	0.10-0.13	0.0-2.9	2.0-6.0	.17	.17	5	2	134
		12-41	2-10	1.35-1.55	2.00-20	0.06-0.12	0.0-2.9	0.5-2.0	.17	.17			
		41-59	1-8	1.45-1.65	2.00-20	0.06-0.10	0.0-2.9	0.0-0.5	.17	.17			
		59-80	1-8	1.45-1.65	2.00-20	0.06-0.10	0.0-2.9	0.0-0.5	.17	.17			
I58A:													
Seelyeville-----	90	0-10	0-0	0.10-0.25	0.20-6.00	0.35-0.48	---	75-99	.02	.02	3	2	134
		10-80	0-0	0.10-0.25	0.20-6.00	0.35-0.48	---	75-99	.02	.02			
Cathro-----	3	0-11	0-0	0.10-0.35	0.20-6.00	0.35-0.48	---	75-95	.02	.02	2	2	134
		11-23	0-0	0.10-0.35	0.20-6.00	0.35-0.48	---	85-95	.02	.02			
		23-60	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-1.0	.37	.37			
Dora-----	3	0-12	0-0	0.10-0.25	0.60-6.00	0.48-0.58	---	85-95	.02	.02	2	2	134
		12-32	0-0	0.15-0.35	0.20-6.00	0.35-0.48	---	85-95	.02	.02			
		32-36	25-40	1.15-1.35	0.20-2.00	0.18-0.24	3.0-5.9	3.0-15	.28	.28			
		36-60	35-70	1.40-1.65	0.06-0.20	0.10-0.20	6.0-8.9	0.0-0.5	.32	.32			
Markey-----	3	0-32	0-0	0.10-0.35	0.20-6.00	0.35-0.48	---	75-95	.02	.02	2	2	134
		32-60	2-8	1.40-1.65	6.00-20	0.03-0.10	0.0-2.9	0.0-0.5	.15	.15			

Table 23.--Physical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth In	Clay Pct	Moist bulk density g/cc	Permea- bility In/hr	Available water capacity In/in	Linear extensi- bility Pct	Organic matter Pct	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
<b>I58A:</b>													
Berner-----	1	0-28	0-0	0.10-0.35	0.20-6.00	0.35-0.48	---	75-95	.02	.02	2	2	134
		28-31	5-15	1.25-1.45	2.00-6.00	0.10-0.18	0.0-2.9	2.0-10	.17	.24			
		31-44	0-5	1.45-1.65	6.00-20	0.05-0.10	0.0-2.9	0.1-0.5	.05	.15			
		44-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
<b>I59A:</b>													
Smiley-----	65	0-12	18-27	1.20-1.50	0.60-2.00	0.20-0.24	0.0-2.9	3.0-8.0	.24	.24	5	5	56
		12-19	18-35	1.35-1.65	0.60-2.00	0.15-0.19	3.0-5.9	0.5-2.0	.24	.24			
		19-42	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.2-1.0	.37	.37			
		42-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Smiley, very cobbly--	10	0-12	18-27	1.20-1.50	0.60-2.00	0.20-0.24	0.0-2.9	3.0-8.0	.20	.24	5	5	56
		12-19	18-35	1.35-1.65	0.60-2.00	0.15-0.19	3.0-5.9	0.5-2.0	.24	.24			
		19-42	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.2-1.0	.37	.37			
		42-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Kratka-----	9	0-11	5-18	1.20-1.50	2.00-6.00	0.16-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		11-18	2-10	1.30-1.60	6.00-20	0.06-0.11	0.0-2.9	0.5-2.0	.17	.17			
		18-25	2-8	1.30-1.60	6.00-20	0.06-0.12	0.0-2.9	0.1-0.5	.17	.17			
		25-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Roliss-----	5	0-14	18-27	1.10-1.50	0.20-2.00	0.17-0.24	3.0-5.9	3.0-8.0	.24	.24	5	4L	86
		14-20	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.5-2.0	.37	.37			
		20-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Reiner-----	4	0-7	5-15	1.10-1.35	2.00-6.00	0.16-0.18	0.0-2.9	2.0-5.0	.20	.20	5	3	86
		7-17	25-35	1.40-1.65	0.60-2.00	0.15-0.19	3.0-5.9	0.2-2.0	.32	.32			
		17-35	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.2-1.0	.37	.37			
		35-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Linveldt-----	3	0-9	5-15	1.15-1.45	2.00-6.00	0.14-0.18	0.0-2.9	2.0-5.0	.20	.20	5	3	86
		9-16	12-25	1.25-1.50	0.60-6.00	0.12-0.18	0.0-2.9	0.2-2.0	.28	.28			
		16-29	1-8	1.45-1.65	6.00-20	0.05-0.11	0.0-2.9	0.1-0.5	.15	.17			
		29-45	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.2-1.0	.37	.37			
		45-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Smiley, depressiona--	3	0-12	15-27	1.10-1.40	0.20-2.00	0.20-0.30	3.0-5.9	3.0-15	.24	.24	5	5	56
		12-19	18-35	1.35-1.65	0.60-2.00	0.15-0.19	3.0-5.9	1.0-3.0	.24	.24			
		19-42	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.2-1.0	.37	.37			
		42-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Strandquist-----	1	0-10	10-18	1.10-1.40	2.00-6.00	0.20-0.22	0.0-2.9	3.0-8.0	.24	.24	5	4L	86
		10-20	1-8	1.50-1.70	6.00-20	0.02-0.07	0.0-2.9	0.5-2.0	.10	.15			
		20-60	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			

Table 23.--Physical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Clay	Moist bulk density	Permea- bility	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
I60A: Smiley, depressional--	80	0-12	15-27	1.10-1.40	0.20-2.00	0.20-0.30	3.0-5.9	3.0-15	.24	.24	5	5	56
		12-19	18-35	1.35-1.65	0.60-2.00	0.15-0.19	3.0-5.9	1.0-3.0	.24	.24			
		19-42	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.2-1.0	.37	.37			
		42-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Smiley-----	10	0-12	18-27	1.20-1.50	0.60-2.00	0.20-0.24	0.0-2.9	3.0-8.0	.24	.24	5	5	56
		12-19	18-35	1.35-1.65	0.60-2.00	0.15-0.19	3.0-5.9	0.5-2.0	.24	.24			
		19-42	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.2-1.0	.37	.37			
		42-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Hamre-----	5	0-13	0-0	0.10-0.40	0.20-6.00	0.35-0.48	---	50-95	.02	.02	5	2	134
		13-18	18-35	1.25-1.50	0.20-2.00	0.17-0.22	3.0-5.9	2.0-10	.32	.32			
		18-71	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
		71-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Kratka-----	5	0-11	5-18	1.20-1.50	2.00-6.00	0.16-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		11-18	2-10	1.30-1.60	6.00-20	0.06-0.11	0.0-2.9	0.5-2.0	.17	.17			
		18-25	2-8	1.30-1.60	6.00-20	0.06-0.12	0.0-2.9	0.1-0.5	.17	.17			
		25-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
I61A: Strandquist-----	70	0-10	10-18	1.10-1.40	2.00-6.00	0.20-0.22	0.0-2.9	3.0-8.0	.24	.24	5	4L	86
		10-20	1-8	1.50-1.70	6.00-20	0.02-0.07	0.0-2.9	0.5-2.0	.10	.15			
		20-60	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Mavie-----	8	0-12	10-18	1.20-1.50	2.00-6.00	0.16-0.18	0.0-2.9	3.0-8.0	.20	.20	3	3	86
		12-18	10-25	1.35-1.55	0.60-2.00	0.12-0.19	0.0-2.9	0.5-2.0	.28	.28			
		18-39	1-10	1.40-1.65	6.00-20	0.03-0.06	0.0-2.9	0.0-0.5	.10	.15			
		39-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Roliss-----	7	0-14	18-27	1.10-1.50	0.20-2.00	0.17-0.24	3.0-5.9	3.0-8.0	.24	.24	5	4L	86
		14-20	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.5-2.0	.37	.37			
		20-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Kratka-----	5	0-11	5-18	1.20-1.50	2.00-6.00	0.16-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		11-18	2-10	1.30-1.60	6.00-20	0.06-0.11	0.0-2.9	0.5-2.0	.17	.17			
		18-25	2-8	1.30-1.60	6.00-20	0.06-0.12	0.0-2.9	0.1-0.5	.17	.17			
		25-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Foxhome-----	4	0-10	5-15	1.15-1.45	2.00-6.00	0.13-0.15	0.0-2.9	2.0-5.0	.20	.20	5	3	86
		10-15	2-10	1.40-1.60	6.00-20	0.07-0.12	0.0-2.9	0.2-1.0	.15	.20			
		15-23	1-5	1.50-1.70	6.00-20	0.02-0.07	0.0-2.9	0.1-0.5	.05	.15			
		23-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			

Table 23.--Physical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Clay	Moist bulk density	Permea- bility	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
		In	Pct	g/cc	In/hr	In/in	Pct	Pct					
I61A:													
Hangaard-----	3	0-10	8-18	1.10-1.40	2.00-6.00	0.10-0.15	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		10-15	5-15	1.10-1.45	6.00-20	0.07-0.11	0.0-2.9	1.0-3.0	.17	.17			
		15-80	1-5	1.50-1.70	6.00-40	0.02-0.04	0.0-2.9	0.0-0.5	.10	.15			
Northwood-----	3	0-9	0-0	0.10-0.40	0.20-6.00	0.35-0.48	---	50-95	.02	.02	4	2	134
		9-14	5-15	1.25-1.45	2.00-20	0.10-0.18	0.0-2.9	2.0-10	.15	.15			
		14-24	2-8	1.45-1.70	6.00-20	0.06-0.11	0.0-2.9	0.1-0.5	.15	.15			
		24-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
I62A:													
Syrene-----	70	0-9	8-18	1.10-1.40	0.60-2.00	0.13-0.15	0.0-2.9	3.0-8.0	.20	.20	3	3	86
		9-17	10-25	1.30-1.50	2.00-6.00	0.12-0.19	0.0-2.9	0.5-2.0	.32	.32			
		17-27	1-5	1.50-1.70	6.00-20	0.02-0.04	0.0-2.9	0.0-0.5	.05	.10			
		27-60	1-5	1.50-1.70	6.00-20	0.02-0.04	0.0-2.9	0.0-0.5	.05	.10			
Rosewood-----	11	0-8	5-18	1.00-1.35	2.00-6.00	0.16-0.18	0.0-2.9	3.0-8.0	.24	.24	3	3	86
		8-18	6-18	1.30-1.50	2.00-6.00	0.09-0.17	0.0-2.9	0.5-2.0	.24	.24			
		18-80	2-8	1.45-1.65	6.00-20	0.05-0.08	0.0-2.9	0.0-0.5	.15	.15			
Hangaard-----	5	0-10	8-18	1.10-1.40	2.00-6.00	0.10-0.15	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		10-15	5-15	1.10-1.45	6.00-20	0.07-0.11	0.0-2.9	1.0-3.0	.17	.17			
		15-80	1-5	1.50-1.70	6.00-40	0.02-0.04	0.0-2.9	0.0-0.5	.10	.15			
Karlsruhe-----	4	0-15	5-15	1.10-1.40	2.00-6.00	0.10-0.15	0.0-2.9	2.0-6.0	.20	.20	5	3	86
		15-30	2-12	1.20-1.60	2.00-20	0.09-0.14	0.0-2.9	0.5-2.0	.20	.20			
		30-60	0-5	1.30-1.60	6.00-40	0.02-0.07	0.0-2.9	0.0-0.5	.10	.15			
Deerwood-----	3	0-10	0-0	0.15-0.35	0.20-6.00	0.35-0.48	---	50-95	.02	.02	3	2	134
		10-12	2-15	1.25-1.45	2.00-20	0.09-0.17	0.0-2.9	2.0-10	.17	.17			
		12-60	1-8	1.50-1.70	6.00-20	0.02-0.10	0.0-2.9	0.0-0.5	.15	.17			
Hamar-----	3	0-12	2-10	1.20-1.40	2.00-20	0.10-0.13	0.0-2.9	3.0-8.0	.17	.17	5	2	134
		12-17	2-10	1.35-1.55	2.00-20	0.06-0.12	0.0-2.9	0.5-2.0	.17	.17			
		17-40	1-8	1.45-1.65	2.00-20	0.06-0.10	0.0-2.9	0.0-0.5	.17	.17			
		40-47	2-10	1.30-1.50	2.00-20	0.10-0.13	0.0-2.9	1.0-4.0	.17	.17			
		47-60	1-8	1.45-1.65	2.00-20	0.06-0.10	0.0-2.9	0.0-0.5	.17	.17			
Strandquist-----	2	0-10	10-18	1.10-1.40	2.00-6.00	0.20-0.22	0.0-2.9	3.0-8.0	.24	.24	5	4L	86
		10-20	1-8	1.50-1.70	6.00-20	0.02-0.07	0.0-2.9	0.5-2.0	.10	.15			
		20-60	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			

Table 23.--Physical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Clay	Moist bulk density	Permea- bility	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
I62A:		In	Pct	g/cc	In/hr	In/in	Pct	Pct					
Radium-----	1	0-14	2-8	1.20-1.40	6.00-20	0.06-0.12	0.0-2.9	1.0-3.0	.17	.17	5	2	134
		14-33	1-8	1.40-1.65	6.00-20	0.03-0.08	0.0-2.9	0.0-0.5	.10	.10			
		33-43	1-5	1.55-1.75	20-40	0.02-0.05	0.0-2.9	0.0-0.5	.10	.17			
		43-80	1-5	1.55-1.75	6.00-20	0.03-0.09	0.0-2.9	0.0-0.5	.10	.17			
Wyandotte-----	1	0-8	27-30	1.20-1.45	0.60-2.00	0.14-0.19	0.0-2.9	3.0-8.0	.32	.32	5	4L	86
		8-15	18-25	1.25-1.50	0.60-2.00	0.14-0.18	0.0-2.9	0.2-2.0	.32	.32			
		15-34	1-5	1.40-1.70	6.00-20	0.02-0.07	0.0-2.9	0.1-0.5	.10	.15			
		34-60	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
I63A:													
Thiefriever-----	70	0-12	8-18	1.20-1.45	2.00-6.00	0.13-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		12-23	10-18	1.30-1.50	2.00-6.00	0.09-0.17	0.0-2.9	0.5-2.0	.24	.24			
		23-32	2-8	1.45-1.70	6.00-20	0.06-0.11	0.0-2.9	0.1-0.5	.17	.17			
		32-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Espelie-----	10	0-9	5-18	1.20-1.45	2.00-6.00	0.13-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		9-24	3-10	1.35-1.60	2.00-20	0.06-0.11	0.0-2.9	0.5-1.0	.17	.17			
		24-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Foxlake-----	7	0-19	18-27	1.15-1.35	0.60-6.00	0.20-0.22	0.0-2.9	3.0-8.0	.24	.24	5	4L	86
		19-38	35-60	1.25-1.45	0.06-0.20	0.09-0.19	6.0-8.9	0.5-2.0	.28	.28			
		38-49	35-60	1.25-1.45	0.06-0.20	0.09-0.19	6.0-8.9	0.1-0.5	.28	.28			
		49-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Huot-----	5	0-14	5-15	1.15-1.45	2.00-6.00	0.13-0.18	0.0-2.9	2.0-5.0	.20	.20	5	3	86
		14-26	5-15	1.30-1.60	2.00-6.00	0.09-0.17	0.0-2.9	0.2-1.0	.20	.20			
		26-34	2-8	1.55-1.70	6.00-20	0.06-0.11	0.0-2.9	0.1-0.5	.20	.20			
		34-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Clearwater, depressional-----	3	0-8	27-35	1.20-1.45	0.20-2.00	0.17-0.30	3.0-5.9	3.0-15	.24	.24	5	6	48
		8-35	35-60	1.20-1.50	0.06-0.20	0.10-0.19	6.0-8.9	1.0-3.0	.32	.32			
		35-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Rosewood-----	3	0-8	5-18	1.00-1.35	2.00-6.00	0.16-0.18	0.0-2.9	3.0-8.0	.24	.24	3	3	86
		8-18	6-18	1.30-1.50	2.00-6.00	0.09-0.17	0.0-2.9	0.5-2.0	.24	.24			
		18-80	2-8	1.45-1.65	6.00-20	0.05-0.08	0.0-2.9	0.0-0.5	.15	.15			
Ulen-----	1	0-9	8-18	1.15-1.45	2.00-6.00	0.13-0.18	0.0-2.9	2.0-5.0	.20	.20	3	3	86
		9-42	5-15	1.30-1.60	2.00-6.00	0.09-0.17	0.0-2.9	0.2-1.0	.24	.24			
		42-60	2-8	1.45-1.65	6.00-20	0.05-0.08	0.0-2.9	0.0-0.5	.15	.15			

Table 23.--Physical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Clay	Moist bulk density	Permea- bility	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
		In	Pct	g/cc	In/hr	In/in	Pct	Pct					
I63A: Wyandotte-----	1	0-8	27-30	1.20-1.45	0.60-2.00	0.14-0.19	0.0-2.9	3.0-8.0	.32	.32	5	4L	86
		8-15	18-25	1.25-1.50	0.60-2.00	0.14-0.18	0.0-2.9	0.2-2.0	.32	.32			
		15-34	1-5	1.40-1.70	6.00-20	0.02-0.07	0.0-2.9	0.1-0.5	.10	.15			
		34-60	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
I64A: Ulen-----	70	0-9	8-18	1.15-1.45	2.00-6.00	0.13-0.18	0.0-2.9	2.0-5.0	.20	.20	3	3	86
		9-42	5-15	1.30-1.60	2.00-6.00	0.09-0.17	0.0-2.9	0.2-1.0	.24	.24			
		42-60	2-8	1.45-1.65	6.00-20	0.05-0.08	0.0-2.9	0.0-0.5	.15	.15			
Rosewood-----	10	0-8	5-18	1.00-1.35	2.00-6.00	0.16-0.18	0.0-2.9	3.0-8.0	.24	.24	3	3	86
		8-18	6-18	1.30-1.50	2.00-6.00	0.09-0.17	0.0-2.9	0.5-2.0	.24	.24			
		18-80	2-8	1.45-1.65	6.00-20	0.05-0.08	0.0-2.9	0.0-0.5	.15	.15			
Flaming-----	8	0-12	2-10	1.20-1.40	6.00-20	0.10-0.12	0.0-2.9	2.0-4.0	.17	.17	5	2	134
		12-17	2-10	1.30-1.50	6.00-20	0.06-0.12	0.0-2.9	0.5-3.0	.17	.17			
		17-27	2-8	1.30-1.50	6.00-20	0.05-0.12	0.0-2.9	0.2-1.0	.17	.17			
		27-60	1-8	1.50-1.70	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.17	.17			
Karlsruhe-----	5	0-15	5-15	1.10-1.40	2.00-6.00	0.10-0.15	0.0-2.9	2.0-6.0	.20	.20	5	3	86
		15-30	2-12	1.20-1.60	2.00-20	0.09-0.14	0.0-2.9	0.5-2.0	.20	.20			
		30-60	0-5	1.30-1.60	6.00-40	0.02-0.07	0.0-2.9	0.0-0.5	.10	.15			
Radium-----	3	0-14	2-8	1.20-1.40	6.00-20	0.06-0.12	0.0-2.9	1.0-3.0	.17	.17	5	2	134
		14-33	1-8	1.40-1.65	6.00-20	0.03-0.08	0.0-2.9	0.0-0.5	.10	.10			
		33-43	1-5	1.55-1.75	20-40	0.02-0.05	0.0-2.9	0.0-0.5	.10	.17			
		43-80	1-5	1.55-1.75	6.00-20	0.03-0.09	0.0-2.9	0.0-0.5	.10	.17			
Strathcona-----	2	0-10	5-18	1.20-1.50	2.00-20	0.13-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		10-17	10-18	1.30-1.50	2.00-6.00	0.09-0.17	0.0-2.9	0.5-2.0	.24	.24			
		17-28	2-8	1.35-1.60	6.00-20	0.05-0.12	0.0-2.9	0.1-0.5	.15	.15			
		28-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Thiefriever-----	2	0-12	8-18	1.20-1.45	2.00-6.00	0.13-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		12-23	10-18	1.30-1.50	2.00-6.00	0.09-0.17	0.0-2.9	0.5-2.0	.24	.24			
		23-32	2-8	1.45-1.70	6.00-20	0.06-0.11	0.0-2.9	0.1-0.5	.17	.17			
		32-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
I65A: Ulen-----	70	0-9	2-10	1.20-1.40	6.00-20	0.10-0.12	0.0-2.9	2.0-5.0	.17	.17	5	2	134
		9-42	5-15	1.30-1.60	2.00-6.00	0.09-0.17	0.0-2.9	0.2-1.0	.24	.24			
		42-60	2-8	1.45-1.65	6.00-20	0.05-0.08	0.0-2.9	0.0-0.5	.15	.15			

Table 23.--Physical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Clay	Moist bulk density	Permea- bility	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
<b>I65A:</b>													
Rosewood-----	10	0-8	5-18	1.00-1.35	2.00-6.00	0.16-0.18	0.0-2.9	3.0-8.0	.24	.24	3	3	86
		8-18	6-18	1.30-1.50	2.00-6.00	0.09-0.17	0.0-2.9	0.5-2.0	.24	.24			
		18-80	2-8	1.45-1.65	6.00-20	0.05-0.08	0.0-2.9	0.0-0.5	.15	.15			
Flaming-----	6	0-12	2-10	1.20-1.40	6.00-20	0.10-0.12	0.0-2.9	2.0-4.0	.17	.17	5	2	134
		12-17	2-10	1.30-1.50	6.00-20	0.06-0.12	0.0-2.9	0.5-3.0	.17	.17			
		17-27	2-8	1.30-1.50	6.00-20	0.05-0.12	0.0-2.9	0.2-1.0	.17	.17			
		27-60	1-8	1.50-1.70	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.17	.17			
Poppleton-----	4	0-6	2-10	1.20-1.40	6.00-20	0.08-0.10	0.0-2.9	0.5-2.0	.15	.15	5	1	250
		6-9	1-8	1.35-1.55	6.00-20	0.05-0.12	0.0-2.9	0.1-0.5	.15	.15			
		9-40	1-8	1.35-1.55	6.00-20	0.05-0.12	0.0-2.9	0.1-0.5	.15	.15			
		40-60	1-8	1.45-1.65	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.15	.15			
Karlsruhe-----	3	0-15	5-15	1.10-1.40	2.00-6.00	0.10-0.15	0.0-2.9	2.0-6.0	.20	.20	5	3	86
		15-30	2-12	1.20-1.60	2.00-20	0.09-0.14	0.0-2.9	0.5-2.0	.20	.20			
		30-60	0-5	1.30-1.60	6.00-40	0.02-0.07	0.0-2.9	0.0-0.5	.10	.15			
Radium-----	3	0-14	2-8	1.20-1.40	6.00-20	0.06-0.12	0.0-2.9	1.0-3.0	.17	.17	5	2	134
		14-33	1-8	1.40-1.65	6.00-20	0.03-0.08	0.0-2.9	0.0-0.5	.10	.10			
		33-43	1-5	1.55-1.75	20-40	0.02-0.05	0.0-2.9	0.0-0.5	.10	.17			
		43-80	1-5	1.55-1.75	6.00-20	0.03-0.09	0.0-2.9	0.0-0.5	.10	.17			
Strathcona-----	2	0-10	5-18	1.20-1.50	2.00-20	0.13-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		10-17	10-18	1.30-1.50	2.00-6.00	0.09-0.17	0.0-2.9	0.5-2.0	.24	.24			
		17-28	2-8	1.35-1.60	6.00-20	0.05-0.12	0.0-2.9	0.1-0.5	.15	.15			
		28-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Thiefriever-----	2	0-12	8-18	1.20-1.45	2.00-6.00	0.13-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		12-23	10-18	1.30-1.50	2.00-6.00	0.09-0.17	0.0-2.9	0.5-2.0	.24	.24			
		23-32	2-8	1.45-1.70	6.00-20	0.06-0.11	0.0-2.9	0.1-0.5	.17	.17			
		32-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
<b>I66A:</b>													
Vallars-----	75	0-12	18-27	1.10-1.35	0.60-2.00	0.20-0.22	0.0-2.9	3.0-8.0	.24	.24	5	4L	86
		12-21	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.5-2.0	.37	.37			
		21-60	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Vallars, very cobbly--	7	0-12	18-27	1.10-1.35	0.60-2.00	0.20-0.22	0.0-2.9	3.0-8.0	.20	.24	5	4L	86
		12-21	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.5-2.0	.37	.37			
		21-60	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			

Table 23.--Physical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Clay	Moist bulk density	Permea- bility	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
<b>I66A:</b>													
Hamerly-----	6	0-8	18-27	1.00-1.30	0.60-2.00	0.20-0.22	3.0-5.9	2.0-5.0	.24	.24	5	4L	86
		8-25	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.2-2.0	.37	.37			
		25-60	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Grimstad-----	3	0-9	10-18	1.15-1.45	2.00-6.00	0.14-0.18	0.0-2.9	2.0-5.0	.20	.20	5	3	86
		9-22	5-15	1.30-1.60	6.00-20	0.09-0.17	0.0-2.9	0.2-1.0	.20	.20			
		22-28	2-8	1.45-1.60	6.00-20	0.05-0.14	0.0-2.9	0.1-0.5	.20	.20			
		28-60	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Mavie-----	3	0-12	10-18	1.20-1.50	2.00-6.00	0.16-0.18	0.0-2.9	3.0-8.0	.20	.20	3	3	86
		12-18	10-25	1.35-1.55	0.60-2.00	0.12-0.19	0.0-2.9	0.5-2.0	.28	.28			
		18-39	1-10	1.40-1.65	6.00-20	0.03-0.06	0.0-2.9	0.0-0.5	.10	.15			
		39-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Roliss, depressional--	3	0-14	15-27	1.10-1.40	0.20-2.00	0.20-0.25	3.0-5.9	3.0-15	.24	.24	5	6	48
		14-20	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	1.0-3.0	.37	.37			
		20-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Strathcona-----	3	0-10	5-18	1.20-1.50	2.00-20	0.13-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		10-17	10-18	1.30-1.50	2.00-6.00	0.09-0.17	0.0-2.9	0.5-2.0	.24	.24			
		17-28	2-8	1.35-1.60	6.00-20	0.05-0.12	0.0-2.9	0.1-0.5	.15	.15			
		28-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
<b>I67A:</b>													
Wheatville-----	70	0-9	15-22	1.05-1.25	0.60-2.00	0.20-0.23	0.0-2.9	2.0-6.0	.28	.28	5	4L	86
		9-31	10-18	1.30-1.50	0.60-6.00	0.17-0.22	0.0-2.9	0.2-2.0	.43	.43			
		31-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Augsburg-----	13	0-11	15-22	0.95-1.20	0.60-2.00	0.20-0.23	0.0-2.9	3.0-8.0	.28	.28	5	4L	86
		11-18	5-18	1.30-1.50	0.60-6.00	0.17-0.22	0.0-2.9	0.2-2.0	.28	.28			
		18-33	5-18	1.40-1.60	0.60-6.00	0.17-0.22	0.0-2.9	0.1-0.5	.28	.28			
		33-60	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Glyndon-----	8	0-11	10-20	1.05-1.25	0.60-2.00	0.20-0.23	0.0-2.9	2.0-6.0	.28	.28	5	3	86
		11-28	10-18	1.30-1.50	0.60-6.00	0.17-0.22	0.0-2.9	0.2-2.0	.28	.28			
		28-60	5-18	1.35-1.65	0.60-6.00	0.08-0.22	0.0-2.9	0.0-0.5	.28	.28			
Foxlake-----	5	0-19	18-27	1.15-1.35	0.60-6.00	0.20-0.22	0.0-2.9	3.0-8.0	.24	.24	5	4L	86
		19-38	35-60	1.25-1.45	0.06-0.20	0.09-0.19	6.0-8.9	0.5-2.0	.28	.28			
		38-49	35-60	1.25-1.45	0.06-0.20	0.09-0.19	6.0-8.9	0.1-0.5	.28	.28			
		49-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Hilaire-----	2	0-10	2-10	1.20-1.40	6.00-20	0.10-0.14	0.0-2.9	2.0-4.0	.17	.17	5	2	134
		10-34	1-8	1.35-1.60	6.00-20	0.07-0.11	0.0-2.9	0.5-1.0	.15	.15			
		34-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			

Table 23.--Physical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Clay	Moist bulk density	Permea- bility	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
I67A:		In	Pct	g/cc	In/hr	In/in	Pct	Pct					
Ulen-----	2	0-9	2-10	1.20-1.40	6.00-20	0.10-0.12	0.0-2.9	2.0-5.0	.17	.17	5	2	134
		9-42	5-15	1.30-1.60	2.00-6.00	0.09-0.17	0.0-2.9	0.2-1.0	.24	.24			
		42-60	2-8	1.45-1.65	6.00-20	0.05-0.08	0.0-2.9	0.0-0.5	.15	.15			
I68A:													
Wheatville-----	70	0-9	10-20	1.25-1.40	0.60-2.00	0.18-0.22	0.0-2.9	2.0-6.0	.28	.28	5	3	86
		9-31	10-18	1.30-1.50	0.60-6.00	0.17-0.22	0.0-2.9	0.2-2.0	.43	.43			
		31-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Augsburg-----	13	0-11	15-22	0.95-1.20	0.60-2.00	0.20-0.23	0.0-2.9	3.0-8.0	.28	.28	5	4L	86
		11-18	5-18	1.30-1.50	0.60-6.00	0.17-0.22	0.0-2.9	0.2-2.0	.28	.28			
		18-33	5-18	1.40-1.60	0.60-6.00	0.17-0.22	0.0-2.9	0.1-0.5	.28	.28			
		33-60	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Glyndon-----	8	0-11	10-20	1.05-1.25	0.60-2.00	0.20-0.23	0.0-2.9	2.0-6.0	.28	.28	5	3	86
		11-28	10-18	1.30-1.50	0.60-6.00	0.17-0.22	0.0-2.9	0.2-2.0	.28	.28			
		28-60	5-18	1.35-1.65	0.60-6.00	0.08-0.22	0.0-2.9	0.0-0.5	.28	.28			
Foxlake-----	5	0-19	18-27	1.15-1.35	0.60-6.00	0.20-0.22	0.0-2.9	3.0-8.0	.24	.24	5	4L	86
		19-38	35-60	1.25-1.45	0.06-0.20	0.09-0.19	6.0-8.9	0.5-2.0	.28	.28			
		38-49	35-60	1.25-1.45	0.06-0.20	0.09-0.19	6.0-8.9	0.1-0.5	.28	.28			
		49-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Hilaire-----	2	0-10	2-10	1.20-1.40	6.00-20	0.10-0.14	0.0-2.9	2.0-4.0	.17	.17	5	2	134
		10-34	1-8	1.35-1.60	6.00-20	0.07-0.11	0.0-2.9	0.5-1.0	.15	.15			
		34-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Ulen-----	2	0-9	2-10	1.20-1.40	6.00-20	0.10-0.12	0.0-2.9	2.0-5.0	.17	.17	5	2	134
		9-42	5-15	1.30-1.60	2.00-6.00	0.09-0.17	0.0-2.9	0.2-1.0	.24	.24			
		42-60	2-8	1.45-1.65	6.00-20	0.05-0.08	0.0-2.9	0.0-0.5	.15	.15			
I69A:													
Wyandotte-----	65	0-8	27-30	1.20-1.45	0.60-2.00	0.14-0.19	0.0-2.9	3.0-8.0	.32	.32	5	4L	86
		8-15	18-25	1.25-1.50	0.60-2.00	0.14-0.18	0.0-2.9	0.2-2.0	.32	.32			
		15-34	1-5	1.40-1.70	6.00-20	0.02-0.07	0.0-2.9	0.1-0.5	.10	.15			
		34-60	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Foxlake-----	10	0-19	18-27	1.15-1.35	0.60-6.00	0.20-0.22	0.0-2.9	3.0-8.0	.24	.24	5	4L	86
		19-38	35-60	1.25-1.45	0.06-0.20	0.09-0.19	6.0-8.9	0.5-2.0	.28	.28			
		38-49	35-60	1.25-1.45	0.06-0.20	0.09-0.19	6.0-8.9	0.1-0.5	.28	.28			
		49-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			

Table 23.--Physical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Clay	Moist bulk density	Permea- bility	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
		In	Pct	g/cc	In/hr	In/in	Pct	Pct					
I69A:													
Espelie-----	8	0-9	5-18	1.20-1.45	2.00-6.00	0.13-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		9-24	3-10	1.35-1.60	2.00-20	0.06-0.11	0.0-2.9	0.5-1.0	.17	.17			
		24-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Clearwater, depressional-----	5	0-8	27-35	1.20-1.45	0.20-2.00	0.17-0.30	3.0-5.9	3.0-15	.24	.24	5	6	48
		8-35	35-60	1.20-1.50	0.06-0.20	0.10-0.19	6.0-8.9	1.0-3.0	.32	.32			
		35-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Thiefriver-----	5	0-12	8-18	1.20-1.45	2.00-6.00	0.13-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		12-23	10-18	1.30-1.50	2.00-6.00	0.09-0.17	0.0-2.9	0.5-2.0	.24	.24			
		23-32	2-8	1.45-1.70	6.00-20	0.06-0.11	0.0-2.9	0.1-0.5	.17	.17			
		32-80	35-60	1.25-1.55	0.06-0.20	0.09-0.19	6.0-8.9	0.0-0.5	.28	.28			
Karlsruhe-----	4	0-15	5-15	1.10-1.40	2.00-6.00	0.10-0.15	0.0-2.9	2.0-6.0	.20	.20	5	3	86
		15-30	2-12	1.20-1.60	2.00-20	0.09-0.14	0.0-2.9	0.5-2.0	.20	.20			
		30-60	0-5	1.30-1.60	6.00-40	0.02-0.07	0.0-2.9	0.0-0.5	.10	.15			
Syrene-----	3	0-9	8-18	1.10-1.40	0.60-2.00	0.13-0.15	0.0-2.9	3.0-8.0	.20	.20	3	3	86
		9-17	10-25	1.30-1.50	2.00-6.00	0.12-0.19	0.0-2.9	0.5-2.0	.32	.32			
		17-27	1-5	1.50-1.70	6.00-20	0.02-0.04	0.0-2.9	0.0-0.5	.05	.10			
		27-60	1-5	1.50-1.70	6.00-20	0.02-0.04	0.0-2.9	0.0-0.5	.05	.10			
I70A:													
Strathcona-----	70	0-10	5-18	1.20-1.50	2.00-20	0.13-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		10-17	10-18	1.30-1.50	2.00-6.00	0.09-0.17	0.0-2.9	0.5-2.0	.24	.24			
		17-28	2-8	1.35-1.60	6.00-20	0.05-0.12	0.0-2.9	0.1-0.5	.15	.15			
		28-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Kratka-----	10	0-11	5-18	1.20-1.50	2.00-6.00	0.16-0.18	0.0-2.9	3.0-8.0	.20	.20	5	3	86
		11-18	2-10	1.30-1.60	6.00-20	0.06-0.11	0.0-2.9	0.5-2.0	.17	.17			
		18-25	2-8	1.30-1.60	6.00-20	0.06-0.12	0.0-2.9	0.1-0.5	.17	.17			
		25-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Roliss-----	6	0-14	18-27	1.10-1.50	0.20-2.00	0.17-0.24	3.0-5.9	3.0-8.0	.24	.24	5	4L	86
		14-20	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.5-2.0	.37	.37			
		20-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Grimstad-----	5	0-9	10-18	1.15-1.45	2.00-6.00	0.14-0.18	0.0-2.9	2.0-5.0	.20	.20	5	3	86
		9-22	5-15	1.30-1.60	6.00-20	0.09-0.17	0.0-2.9	0.2-1.0	.20	.20			
		22-28	2-8	1.45-1.60	6.00-20	0.05-0.14	0.0-2.9	0.1-0.5	.20	.20			
		28-60	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			

Table 23.--Physical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Clay	Moist bulk density	Permea- bility	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
		In	Pct	g/cc	In/hr	In/in	Pct	Pct					
I70A: Mavie-----	3	0-12	10-18	1.20-1.50	2.00-6.00	0.16-0.18	0.0-2.9	3.0-8.0	.20	.20	3	3	86
		12-18	10-25	1.35-1.55	0.60-2.00	0.12-0.19	0.0-2.9	0.5-2.0	.28	.28			
		18-39	1-10	1.40-1.65	6.00-20	0.03-0.06	0.0-2.9	0.0-0.5	.10	.15			
		39-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
Rosewood-----	3	0-8	5-18	1.00-1.35	2.00-6.00	0.16-0.18	0.0-2.9	3.0-8.0	.24	.24	3	3	86
		8-18	6-18	1.30-1.50	2.00-6.00	0.09-0.17	0.0-2.9	0.5-2.0	.24	.24			
		18-80	2-8	1.45-1.65	6.00-20	0.05-0.08	0.0-2.9	0.0-0.5	.15	.15			
Strathcona, depressional-----	3	0-10	5-18	1.20-1.50	2.00-20	0.20-0.30	0.0-2.9	3.0-15	.20	.20	3	3	86
		10-17	10-18	1.30-1.50	2.00-6.00	0.09-0.17	0.0-2.9	0.5-2.0	.24	.24			
		17-28	2-8	1.35-1.60	6.00-20	0.05-0.12	0.0-2.9	0.1-0.5	.15	.15			
		28-80	18-30	1.35-1.55	0.60-2.00	0.15-0.19	1.0-4.2	0.0-0.5	.37	.37			
M-W. Miscellaneous water													
W. Water													

Table 24.--Chemical Properties of the Soils

(Absence of an entry indicates that data were not estimated)

Map symbol and soil name	Pct. of map unit	Depth	Cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity
		In	meq/100 g	pH	Pct	Pct	mmhos/cm
<b>E109A:</b>							
Bowstring-----	45	0-38	80-180	5.6-8.4	0-25	0	0
		38-47	10-40	5.6-8.4	0-25	0	0
		47-80	80-180	5.6-8.4	0-25	0	0
Fluvaquents-----	40	0-16	10-35	6.6-7.8	0-10	0	0
		16-80	5.0-30	6.6-7.8	0-15	0	0
Hapludalfs-----	5	0-6	10-20	6.1-7.8	0-1	0	0
		6-8	5.0-15	6.1-7.8	0-1	0	0
		8-25	15-30	6.6-7.8	0-1	0	0
		25-80	5.0-25	7.4-8.4	5-20	0	0
Seelyeville-----	5	0-10	120-200	4.5-7.3	0	0	0
		10-80	140-200	4.5-7.3	0	0	0
Water-----	5	---	---	---	---	---	---
<b>E200A:</b>							
Garnes-----	70	0-6	5.0-25	6.1-7.3	0	0	0
		6-9	1.0-10	6.1-7.3	0	0	0
		9-14	10-25	6.6-7.8	0	0	0
		14-72	10-25	7.4-8.4	15-25	0	0
		72-80	10-20	7.4-8.4	10-20	0	0
Chilgren-----	13	0-4	5.0-20	6.1-7.3	0	0	0
		4-10	1.0-10	6.1-7.3	0	0	0
		10-18	10-25	6.1-7.8	0	0	0
		18-72	10-25	7.4-8.4	15-25	0	0
		72-80	10-20	7.4-8.4	10-20	0	0
Eckvoll-----	5	0-9	3.0-15	6.1-7.3	0	0	0
		9-25	1.0-10	6.1-7.3	0	0	0
		25-32	10-30	6.6-7.8	0	0	0
		32-80	10-20	7.4-8.4	10-20	0	0
Garnes, very stony---	5	0-6	5.0-25	6.1-7.3	0	0	0
		6-9	1.0-10	6.1-7.3	0	0	0
		9-14	10-25	6.6-7.8	0	0	0
		14-72	10-25	7.4-8.4	15-25	0	0
		72-80	10-20	7.4-8.4	10-20	0	0
Grygla-----	4	0-6	5.0-15	6.1-7.3	0	0	0
		6-26	1.0-10	6.6-7.8	0	0	0
		26-80	10-20	7.4-8.4	10-20	0	0
Pelan-----	3	0-6	5.0-25	6.1-7.3	0	0	0
		6-9	1.0-10	6.1-7.3	0	0	0
		9-14	10-20	6.1-7.8	0	0	0
		14-20	1.0-5.0	7.4-8.4	0-15	0	0
		20-60	10-20	7.4-8.4	10-20	0	0
<b>E201A:</b>							
Chilgren-----	75	0-4	5.0-20	6.1-7.3	0	0	0
		4-10	1.0-10	6.1-7.3	0	0	0
		10-18	10-25	6.1-7.8	0	0	0
		18-72	10-25	7.4-8.4	15-25	0	0
		72-80	10-20	7.4-8.4	10-20	0	0

Table 24.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity
		In	meq/100 g	pH	Pct	Pct	mmhos/cm
<b>B201A:</b>							
Garnes-----	9	0-6	5.0-25	6.1-7.3	0	0	0
		6-9	1.0-10	6.1-7.3	0	0	0
		9-14	10-25	6.6-7.8	0	0	0
		14-72	10-25	7.4-8.4	15-25	0	0
		72-80	10-20	7.4-8.4	10-20	0	0
Grygla-----	5	0-6	5.0-15	6.1-7.3	0	0	0
		6-26	1.0-10	6.6-7.8	0	0	0
		26-80	10-20	7.4-8.4	10-20	0	0
Grygla, depressional	5	0-6	15-40	6.1-7.3	0	0	0
		6-26	1.0-10	6.6-7.8	0	0	0
		26-80	10-20	7.4-8.4	10-20	0	0
Hamre-----	5	0-13	120-180	5.1-7.8	0-5	0	0
		13-18	15-35	5.1-7.8	0-10	0	0
		18-35	10-20	6.6-8.4	5-20	0	0
		35-80	10-20	7.4-8.4	10-20	0	0
Pelan-----	1	0-6	5.0-25	6.1-7.3	0	0	0
		6-9	1.0-10	6.1-7.3	0	0	0
		9-14	10-20	6.1-7.8	0	0	0
		14-20	1.0-5.0	7.4-8.4	0-15	0	0
		20-60	10-20	7.4-8.4	10-20	0	0
<b>B202A:</b>							
Cathro-----	80	0-11	120-180	4.5-7.8	0	0	0
		11-23	120-180	4.5-7.8	0	0	0
		23-60	10-20	7.4-8.4	10-20	0	0
Hamre-----	8	0-13	120-180	5.1-7.8	0-5	0	0
		13-18	15-35	5.1-7.8	0-10	0	0
		18-35	10-20	6.6-8.4	5-20	0	0
		35-80	10-20	7.4-8.4	10-20	0	0
Chilgren-----	3	0-4	5.0-20	6.1-7.3	0	0	0
		4-10	1.0-10	6.1-7.3	0	0	0
		10-18	10-25	6.1-7.8	0	0	0
		18-72	10-25	7.4-8.4	15-25	0	0
		72-80	10-20	7.4-8.4	10-20	0	0
Northwood-----	3	0-9	120-180	5.1-7.8	0	0	0
		9-14	5.0-20	5.6-7.8	0-5	0	0
		14-24	1.0-5.0	5.6-8.4	0-15	0	0
		24-80	10-20	7.4-8.4	10-20	0	0
Berner-----	2	0-28	120-180	5.6-7.3	0	0	0
		28-31	5.0-20	6.1-7.3	0	0	0
		31-44	1.0-5.0	6.1-7.8	0-5	0	0
		44-80	10-20	7.4-8.4	10-20	0	0
Grygla-----	2	0-6	5.0-15	6.1-7.3	0	0	0
		6-26	1.0-10	6.6-7.8	0	0	0
		26-80	10-20	7.4-8.4	10-20	0	0
Seelyeville-----	2	0-10	120-200	4.5-7.3	0	0	0
		10-80	140-200	4.5-7.3	0	0	0

Table 24.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity
		In	meq/100 g	pH	Pct	Pct	mmhos/cm
<b>B203A:</b>							
Northwood-----	75	0-9	120-180	5.1-7.8	0	0	0
		9-14	5.0-20	5.6-7.8	0-5	0	0
		14-24	1.0-5.0	5.6-8.4	0-15	0	0
		24-80	10-20	7.4-8.4	10-20	0	0
Hamre-----	10	0-13	120-180	5.1-7.8	0-5	0	0
		13-18	15-35	5.1-7.8	0-10	0	0
		18-35	10-20	6.6-8.4	5-20	0	0
		35-80	10-20	7.4-8.4	10-20	0	0
Grygla-----	7	0-6	5.0-15	6.1-7.3	0	0	0
		6-26	1.0-10	6.6-7.8	0	0	0
		26-80	10-20	7.4-8.4	10-20	0	0
Berner-----	5	0-28	120-180	5.6-7.3	0	0	0
		28-31	5.0-20	6.1-7.3	0	0	0
		31-44	1.0-5.0	6.1-7.8	0-5	0	0
		44-80	10-20	7.4-8.4	10-20	0	0
Chilgren-----	3	0-4	5.0-20	6.1-7.3	0	0	0
		4-10	1.0-10	6.1-7.3	0	0	0
		10-18	10-25	6.1-7.8	0	0	0
		18-72	10-25	7.4-8.4	15-25	0	0
		72-80	10-20	7.4-8.4	10-20	0	0
<b>B204A:</b>							
Roliss-----	75	0-14	20-40	6.6-8.4	0-10	0	0
		14-20	10-25	7.4-8.4	5-15	0	0
		20-80	10-20	7.4-8.4	10-20	0	0
Grygla-----	8	0-6	5.0-15	6.1-7.3	0	0	0
		6-26	1.0-10	6.6-7.8	0	0	0
		26-80	10-20	7.4-8.4	10-20	0	0
Chilgren-----	5	0-4	5.0-20	6.1-7.3	0	0	0
		4-10	1.0-10	6.1-7.3	0	0	0
		10-18	10-25	6.1-7.8	0	0	0
		18-72	10-25	7.4-8.4	15-25	0	0
		72-80	10-20	7.4-8.4	10-20	0	0
Garnes-----	5	0-6	5.0-25	6.1-7.3	0	0	0
		6-9	1.0-10	6.1-7.3	0	0	0
		9-14	10-25	6.6-7.8	0	0	0
		14-72	10-25	7.4-8.4	15-25	0	0
		72-80	10-20	7.4-8.4	10-20	0	0
Roliss, depressional	5	0-14	15-50	6.6-8.4	0-10	0	0
		14-20	10-25	7.4-8.4	5-15	0	0
		20-80	10-20	7.4-8.4	10-20	0	0
Hamre-----	2	0-13	120-180	5.1-7.8	0-5	0	0
		13-18	15-35	5.1-7.8	0-10	0	0
		18-35	10-20	6.6-8.4	5-20	0	0
		35-80	10-20	7.4-8.4	10-20	0	0
<b>B205A:</b>							
Berner-----	80	0-28	120-180	5.6-7.3	0	0	0
		28-31	5.0-20	6.1-7.3	0	0	0
		31-44	1.0-5.0	6.1-7.8	0-5	0	0
		44-80	10-20	7.4-8.4	10-20	0	0

Table 24.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity
		In	meq/100 g	pH	Pct	Pct	mmhos/cm
<b>B205A:</b>							
Northwood-----	7	0-9	120-180	5.1-7.8	0	0	0
		9-14	5.0-20	5.6-7.8	0-5	0	0
		14-24	1.0-5.0	5.6-8.4	0-15	0	0
		24-80	10-20	7.4-8.4	10-20	0	0
Grygla-----	5	0-6	5.0-15	6.1-7.3	0	0	0
		6-26	1.0-10	6.6-7.8	0	0	0
		26-80	10-20	7.4-8.4	10-20	0	0
Cathro-----	3	0-11	120-180	4.5-7.8	0	0	0
		11-23	120-180	4.5-7.8	0	0	0
		23-60	10-20	7.4-8.4	10-20	0	0
Hamre-----	3	0-13	120-180	5.1-7.8	0-5	0	0
		13-18	15-35	5.1-7.8	0-10	0	0
		18-35	10-20	6.6-8.4	5-20	0	0
		35-80	10-20	7.4-8.4	10-20	0	0
Seelyeville-----	2	0-10	120-200	4.5-7.3	0	0	0
		10-80	140-200	4.5-7.3	0	0	0
<b>B206A:</b>							
Hamre-----	80	0-13	120-180	5.1-7.8	0-5	0	0
		13-18	15-35	5.1-7.8	0-10	0	0
		18-35	10-20	6.6-8.4	5-20	0	0
		35-80	10-20	7.4-8.4	10-20	0	0
Chilgren-----	8	0-4	5.0-20	6.1-7.3	0	0	0
		4-10	1.0-10	6.1-7.3	0	0	0
		10-18	10-25	6.1-7.8	0	0	0
		18-72	10-25	7.4-8.4	15-25	0	0
		72-80	10-20	7.4-8.4	10-20	0	0
Northwood-----	5	0-9	120-180	5.1-7.8	0	0	0
		9-14	5.0-20	5.6-7.8	0-5	0	0
		14-24	1.0-5.0	5.6-8.4	0-15	0	0
		24-80	10-20	7.4-8.4	10-20	0	0
Cathro-----	3	0-11	120-180	4.5-7.8	0	0	0
		11-23	120-180	4.5-7.8	0	0	0
		23-60	10-20	7.4-8.4	10-20	0	0
Grygla-----	2	0-6	5.0-15	6.1-7.3	0	0	0
		6-26	1.0-10	6.6-7.8	0	0	0
		26-80	10-20	7.4-8.4	10-20	0	0
Roliss-----	2	0-14	20-40	6.6-8.4	0-10	0	0
		14-20	10-25	7.4-8.4	5-15	0	0
		20-80	10-20	7.4-8.4	10-20	0	0
<b>I1A:</b>							
Augsburg-----	75	0-11	10-30	7.4-8.4	5-25	0	0
		11-18	5.0-20	7.4-8.4	15-40	0-1	0.0-2.0
		18-33	3.0-15	7.4-8.4	10-30	0-1	0.0-2.0
		33-60	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Borup-----	10	0-12	10-30	7.4-8.4	5-25	0	0
		12-34	5.0-15	7.4-8.4	15-40	0-1	0.0-2.0
		34-60	3.0-15	7.4-8.4	10-30	0-1	0.0-2.0

Table 24.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity
		In	meq/100 g	pH	Pct	Pct	mmhos/cm
<b>I1A:</b>							
Foxlake-----	5	0-19	20-40	6.6-7.8	0-5	0	0
		19-38	20-55	7.4-8.4	0-5	0	0
		38-49	20-50	7.4-8.4	10-30	0-1	0.0-2.0
		49-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Augsburg, depressional-----	3	0-11	10-45	7.4-8.4	5-25	0	0
		11-18	5.0-20	7.4-8.4	15-40	0-1	0.0-2.0
		18-33	3.0-15	7.4-8.4	30-35	0-1	0.0-2.0
		33-60	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Wheatville-----	3	0-9	10-25	7.4-8.4	5-25	0	0
		9-31	5.0-20	7.4-8.4	15-40	0-1	0.0-2.0
		31-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Glyndon-----	2	0-11	10-25	7.4-8.4	5-25	0	0
		11-28	5.0-15	7.4-8.4	15-40	0-1	0.0-2.0
		28-60	3.0-15	7.4-8.4	10-30	0-1	0.0-2.0
Espelie-----	1	0-9	10-30	6.6-7.3	0	0	0
		9-24	2.0-8.0	6.6-7.8	0-10	0	0
		24-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Hattie-----	1	0-8	30-55	7.4-8.4	0-5	0	0
		8-22	20-55	7.4-8.4	5-25	0-1	0.0-2.0
		22-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
<b>I2A:</b>							
Augsburg-----	75	0-11	10-30	7.4-8.4	5-25	0	0
		11-18	5.0-20	7.4-8.4	15-40	0-1	0.0-2.0
		18-33	3.0-15	7.4-8.4	10-30	0-1	0.0-2.0
		33-60	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Borup-----	10	0-12	10-30	7.4-8.4	10-25	0	0
		12-34	5.0-15	7.4-8.4	15-40	0-1	0.0-2.0
		34-60	3.0-15	7.4-8.4	10-30	0-1	0.0-2.0
Foxlake-----	5	0-19	20-40	6.6-7.8	0-5	0	0
		19-38	20-55	7.4-8.4	0-5	0	0
		38-49	20-50	7.4-8.4	10-30	0-1	0.0-2.0
		49-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Augsburg, depressional-----	3	0-11	10-45	7.4-8.4	5-25	0	0
		11-18	5.0-20	7.4-8.4	15-40	0-1	0.0-2.0
		18-33	3.0-15	7.4-8.4	30-35	0-1	0.0-2.0
		33-60	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Wheatville-----	3	0-9	10-25	7.4-8.4	5-25	0	0
		9-31	5.0-20	7.4-8.4	15-40	0-1	0.0-2.0
		31-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Glyndon-----	2	0-11	10-25	7.4-8.4	5-25	0	0
		11-28	5.0-15	7.4-8.4	15-40	0-1	0.0-2.0
		28-60	3.0-15	7.4-8.4	10-30	0-1	0.0-2.0
Espelie-----	1	0-9	10-30	6.6-7.3	0	0	0
		9-24	2.0-8.0	6.6-7.8	0-10	0	0
		24-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0

Table 24.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity
		In	meq/100 g	pH	Pct	Pct	mmhos/cm
<b>I2A:</b>							
Hattie-----	1	0-8	30-55	7.4-8.4	0-5	0	0
		8-22	20-55	7.4-8.4	5-25	0-1	0.0-2.0
		22-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
<b>I3A:</b>							
Berner-----	80	0-28	120-180	5.6-7.3	0	0	0
		28-31	5.0-20	6.1-7.3	0	0	0
		31-44	1.0-5.0	6.1-7.8	0-5	0	0
		44-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Northwood-----	7	0-9	120-180	5.1-7.8	0	0	0
		9-14	5.0-20	5.6-7.8	0-5	0	0
		14-24	1.0-5.0	5.6-8.4	0-15	0	0
		24-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Kratka-----	5	0-11	10-30	5.6-7.8	0	0	0
		11-18	1.0-12	5.6-7.8	0-5	0	0
		18-25	2.0-10	6.6-7.8	0-15	0	0
		25-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Hamre-----	3	0-13	120-180	5.1-7.8	0-5	0	0
		13-18	15-35	5.1-7.8	0-10	0	0
		18-71	10-20	6.6-8.4	5-20	0	0
		71-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Strathcona-----	3	0-10	10-30	7.4-8.4	5-15	0	0
		10-17	5.0-15	7.4-8.4	15-30	0-1	0.0-2.0
		17-28	2.0-8.0	7.4-8.4	5-15	0-1	0.0-2.0
		28-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Seelyeville-----	2	0-10	120-200	4.5-7.3	0	0	0
		10-80	140-200	4.5-7.3	0	0	0
<b>I4A:</b>							
Berner-----	30	0-28	120-180	5.6-7.3	0	0	0
		28-31	5.0-20	6.1-7.3	0	0	0
		31-44	1.0-5.0	6.1-7.8	0-5	0	0
		44-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Rosewood, depressional-----	30	0-8	10-40	7.4-8.4	5-25	0	0
		8-18	2.0-10	7.4-8.4	15-40	0-1	0.0-2.0
		18-80	1.0-5.0	7.4-8.4	5-25	0-1	0.0-2.0
Strathcona, depressional-----	30	0-10	10-45	7.4-8.4	5-15	0	0
		10-17	5.0-15	7.4-8.4	15-30	0-1	0.0-2.0
		17-28	2.0-8.0	7.4-8.4	5-15	0-1	0.0-2.0
		28-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Rosewood-----	4	0-8	10-25	7.4-8.4	5-25	0	0
		8-18	2.0-10	7.4-8.4	15-40	0-1	0.0-2.0
		18-80	1.0-5.0	7.4-8.4	5-25	0-1	0.0-2.0
Deerwood-----	2	0-10	100-180	5.6-7.8	0-5	0	0
		10-12	5.0-20	6.1-8.4	0-15	0	0
		12-60	1.0-5.0	7.4-8.4	10-20	0	0

Table 24.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity
		In	meq/100 g	pH	Pct	Pct	mmhos/cm
<b>I4A:</b>							
Mavie-----	2	0-12	10-30	7.4-8.4	5-15	0	0
		12-18	5.0-20	7.9-8.4	15-40	0-1	0.0-2.0
		18-39	1.0-5.0	7.4-8.4	10-25	0-1	0.0-2.0
		39-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Strathcona-----	2	0-10	10-30	7.4-8.4	5-15	0	0
		10-17	5.0-15	7.4-8.4	15-30	0-1	0.0-2.0
		17-28	2.0-8.0	7.4-8.4	5-15	0-1	0.0-2.0
		28-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
<b>I5A:</b>							
Borup-----	75	0-12	10-30	7.4-8.4	5-25	0	0
		12-34	5.0-15	7.4-8.4	15-40	0-1	0.0-2.0
		34-60	3.0-15	7.4-8.4	10-30	0-1	0.0-2.0
Glyndon-----	9	0-11	10-25	7.4-8.4	5-25	0	0
		11-28	5.0-15	7.4-8.4	15-40	0-1	0.0-2.0
		28-60	3.0-15	7.4-8.4	10-30	0-1	0.0-2.0
Rosewood-----	8	0-8	10-25	7.4-8.4	5-25	0	0
		8-18	2.0-10	7.4-8.4	15-40	0-1	0.0-2.0
		18-80	1.0-5.0	7.4-8.4	5-25	0-1	0.0-2.0
Augsburg-----	5	0-11	10-30	7.4-8.4	5-25	0	0
		11-18	5.0-20	7.4-8.4	15-40	0-1	0.0-2.0
		18-33	3.0-15	7.4-8.4	10-30	0-1	0.0-2.0
		33-60	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Augsburg, depressional-----	3	0-11	10-45	7.4-8.4	5-25	0	0
		11-18	5.0-20	7.4-8.4	15-40	0-1	0.0-2.0
		18-33	3.0-15	7.4-8.4	30-35	0-1	0.0-2.0
		33-60	20-50	7.4-8.4	10-30	0-1	0.0-2.0
<b>I6A:</b>							
Borup-----	75	0-12	10-30	7.4-8.4	10-25	0	0
		12-34	5.0-15	7.4-8.4	15-40	0-1	0.0-2.0
		34-60	3.0-15	7.4-8.4	10-30	0-1	0.0-2.0
Glyndon-----	9	0-11	10-25	7.4-8.4	5-25	0	0
		11-28	5.0-15	7.4-8.4	15-40	0-1	0.0-2.0
		28-60	3.0-15	7.4-8.4	10-30	0-1	0.0-2.0
Rosewood-----	8	0-8	10-25	7.4-8.4	5-25	0	0
		8-18	2.0-10	7.4-8.4	15-40	0-1	0.0-2.0
		18-80	1.0-5.0	7.4-8.4	5-25	0-1	0.0-2.0
Augsburg-----	5	0-11	10-30	7.4-8.4	5-25	0	0
		11-18	5.0-20	7.4-8.4	15-40	0-1	0.0-2.0
		18-33	3.0-15	7.4-8.4	10-30	0-1	0.0-2.0
		33-60	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Augsburg, depressional-----	3	0-11	10-45	7.4-8.4	5-25	0	0
		11-18	5.0-20	7.4-8.4	15-40	0-1	0.0-2.0
		18-33	3.0-15	7.4-8.4	30-35	0-1	0.0-2.0
		33-60	20-50	7.4-8.4	10-30	0-1	0.0-2.0

Table 24.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity
		In	meq/100 g	pH	Pct	Pct	mmhos/cm
<b>I7A:</b>							
Bowstring-----	45	0-38	80-180	5.6-8.4	0-25	0	0
		38-47	10-40	5.6-8.4	0-25	0	0
		47-80	80-180	5.6-8.4	0-25	0	0
Fluvaquents-----	45	0-16	10-35	6.6-7.8	0-10	0	0
		16-80	5.0-30	6.6-7.8	0-15	0	0.0-2.0
Hapludolls-----	5	0-9	10-35	6.6-7.8	0-10	0	0
		9-60	10-30	7.4-8.4	0-10	0	0
Water-----	5	---	---	---	---	---	---
<b>I8A:</b>							
Cathro-----	80	0-11	120-180	4.5-7.8	0	0	0
		11-23	120-180	4.5-7.8	0	0	0
		23-60	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Hamre-----	8	0-13	120-180	5.1-7.8	0-5	0	0
		13-18	15-35	5.1-7.8	0-10	0	0
		18-71	10-20	6.6-8.4	5-20	0	0
		71-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Northwood-----	3	0-9	120-180	5.1-7.8	0	0	0
		9-14	5.0-20	5.6-7.8	0-5	0	0
		14-24	1.0-5.0	5.6-8.4	0-15	0	0
		24-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Roliss-----	3	0-14	20-40	6.6-8.4	0-10	0	0
		14-20	10-25	7.4-8.4	5-15	0-1	0.0-2.0
		20-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Berner-----	2	0-28	120-180	5.6-7.3	0	0	0
		28-31	5.0-20	6.1-7.3	0	0	0
		31-44	1.0-5.0	6.1-7.8	0-5	0	0
		44-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Kratka-----	2	0-11	10-30	5.6-7.8	0	0	0
		11-18	1.0-12	5.6-7.8	0-5	0	0
		18-25	2.0-10	6.6-7.8	0-15	0	0
		25-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Seelyeville-----	2	0-10	120-200	4.5-7.3	0	0	0
		10-80	140-200	4.5-7.3	0	0	0
<b>I9A:</b>							
Clearwater-----	80	0-8	30-65	6.6-7.8	0-5	0	0
		8-35	20-50	7.4-8.4	3-25	0	0
		35-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Clearwater, very cobbly-----	5	0-8	30-65	6.6-7.8	0-5	0	0
		8-35	20-50	7.4-8.4	3-25	0	0
		35-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Reis-----	5	0-9	30-65	7.4-8.4	5-20	0	0
		9-17	25-65	7.4-8.4	15-25	0	0
		17-33	25-50	7.4-8.4	15-30	0-1	0.0-2.0
		33-42	25-60	7.4-8.4	15-30	0-1	0.0-2.0
		42-60	20-50	7.4-8.4	10-30	0-1	0.0-2.0
		60-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0

Table 24.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity
		In	meq/100 g	pH	Pct	Pct	mmhos/cm
<b>I9A:</b>							
Clearwater, depressional-----	3	0-8	20-60	6.6-7.8	0-5	0	0
		8-35	20-55	7.4-8.4	3-25	0	0
		35-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Espelie-----	3	0-9	10-30	6.6-7.3	0	0	0
		9-24	2.0-8.0	6.6-7.8	0-10	0	0
		24-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Foxlake-----	2	0-19	20-40	6.6-7.8	0-5	0	0
		19-38	20-55	7.4-8.4	0-5	0	0
		38-49	20-50	7.4-8.4	10-30	0-1	0.0-2.0
		49-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Hattie-----	1	0-8	30-55	7.4-8.4	0-5	0	0
		8-22	20-55	7.4-8.4	5-25	0-1	0.0-2.0
		22-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Huot-----	1	0-14	5.0-25	7.4-8.4	5-25	0	0
		14-26	5.0-15	7.4-8.4	15-40	0-1	0.0-2.0
		26-34	1.0-5.0	7.4-8.4	5-20	0-1	0.0-2.0
		34-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
<b>I10A:</b>							
Clearwater, depressional-----	85	0-8	20-60	6.6-7.8	0-5	0	0
		8-35	20-55	7.4-8.4	3-25	0	0
		35-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Clearwater-----	9	0-8	30-65	6.6-7.8	0-5	0	0
		8-35	20-50	7.4-8.4	3-25	0	0
		35-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Augsburg, depressional-----	3	0-11	10-45	7.4-8.4	5-25	0	0
		11-18	5.0-20	7.4-8.4	15-40	0-1	0.0-2.0
		18-33	3.0-15	7.4-8.4	30-35	0-1	0.0-2.0
		33-60	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Reis-----	2	0-9	30-65	7.4-8.4	5-20	0	0
		9-17	25-65	7.4-8.4	15-25	0	0
		17-33	25-50	7.4-8.4	15-30	0-1	0.0-2.0
		33-42	25-60	7.4-8.4	15-30	0-1	0.0-2.0
		42-60	20-50	7.4-8.4	10-30	0-1	0.0-2.0
		60-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Espelie-----	1	0-9	10-30	6.6-7.3	0	0	0
		9-24	2.0-8.0	6.6-7.8	0-10	0	0
		24-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
<b>I11A:</b>							
Deerwood-----	85	0-10	100-180	5.6-7.8	0-5	0	0
		10-12	5.0-20	6.1-8.4	0-15	0	0
		12-60	1.0-5.0	7.4-8.4	10-20	0	0
Rosewood-----	6	0-8	10-25	7.4-8.4	5-25	0	0
		8-18	2.0-10	7.4-8.4	15-40	0-1	0.0-2.0
		18-80	1.0-5.0	7.4-8.4	5-25	0-1	0.0-2.0

Table 24.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth		Cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity
		In	meq/100 g	pH	Pct	Pct	mmhos/cm	
<b>I11A:</b>								
Markey-----	3	0-32	120-180	4.5-7.8	0	0	0	
		32-60	1.0-5.0	5.6-8.4	0-5	0	0	
Strathcona-----	2	0-10	10-30	7.4-8.4	5-15	0	0	
		10-17	5.0-15	7.4-8.4	15-30	0-1	0.0-2.0	
		17-28	2.0-8.0	7.4-8.4	5-15	0-1	0.0-2.0	
		28-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0	
Syrene-----	2	0-9	10-25	7.4-8.4	5-20	0	0	
		9-17	5.0-25	7.9-8.4	15-35	0-1	0.0-2.0	
		17-27	1.0-5.0	7.4-8.4	10-30	0-1	0.0-2.0	
		27-60	1.0-5.0	7.4-8.4	5-15	0	0.0-2.0	
Venlo-----	2	0-13	15-40	6.1-7.3	0	0	0	
		13-60	1.0-5.0	6.6-8.4	0-10	0	0.0-2.0	
<b>I12A:</b>								
Eckvoll-----	70	0-9	3.0-15	6.1-7.3	0	0	0	
		9-25	1.0-10	6.1-7.3	0	0	0	
		25-32	10-30	6.6-7.8	0	0	0	
		32-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0	
Kratka-----	8	0-11	10-30	5.6-7.8	0	0	0	
		11-18	1.0-12	5.6-7.8	0-5	0	0	
		18-25	2.0-10	6.6-7.8	0-15	0	0	
		25-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0	
Smiley-----	7	0-12	10-25	6.6-7.8	0-5	0	0	
		12-19	10-30	6.6-8.4	0-10	0	0	
		19-42	10-25	7.4-8.4	15-30	0-1	0.0-2.0	
		42-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0	
Linveldt-----	5	0-9	10-25	6.6-7.8	0	0	0	
		9-16	8.0-20	6.6-7.8	0	0	0	
		16-29	1.0-5.0	7.4-8.4	0-15	0	0	
		29-45	10-25	7.4-8.4	15-25	0-1	0.0-2.0	
		45-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0	
Reiner-----	5	0-7	5.0-25	6.6-7.3	0	0	0	
		7-17	15-30	6.6-7.3	0-10	0	0	
		17-35	10-25	7.4-8.4	15-25	0-1	0.0-2.0	
		35-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0	
Foldahl-----	2	0-12	5.0-15	6.1-7.8	0-5	0	0	
		12-30	2.0-10	6.6-7.8	0-10	0	0	
		30-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0	
Pelan-----	2	0-6	5.0-25	6.1-7.3	0	0	0	
		6-9	1.0-10	6.1-7.3	0	0	0	
		9-14	10-20	6.1-7.8	0	0	0	
		14-20	1.0-5.0	7.4-8.4	0-15	0	0	
		20-60	10-20	7.4-8.4	10-20	0-1	0.0-2.0	
Poppleton-----	1	0-6	3.0-12	5.6-7.3	0	0	0	
		6-9	1.0-6.0	6.1-7.8	0-5	0	0	
		9-40	1.0-6.0	6.1-7.8	0-10	0	0	
		40-60	1.0-6.0	6.1-7.8	0-15	0	0	

Table 24.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity
		In	meq/100 g	pH	Pct	Pct	mmhos/cm
I13A:							
Espelie-----	75	0-9	10-30	6.6-7.3	0	0	0
		9-24	2.0-8.0	6.6-7.8	0-10	0	0
		24-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Foxlake-----	8	0-19	20-40	6.6-7.8	0-5	0	0
		19-38	20-55	7.4-8.4	0-5	0	0
		38-49	20-50	7.4-8.4	10-30	0-1	0.0-2.0
		49-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Hilaire-----	7	0-10	10-25	6.6-7.3	0-5	0	0
		10-34	2.0-8.0	6.6-7.8	0-10	0	0
		34-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Clearwater, depressional-----	5	0-8	20-60	6.6-7.8	0-5	0	0
		8-35	20-55	7.4-8.4	3-25	0	0
		35-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Thiefriever-----	5	0-12	10-30	7.4-8.4	5-25	0	0
		12-23	5.0-15	7.4-8.4	15-40	0-1	0.0-2.0
		23-32	1.0-5.0	7.4-8.4	5-20	0-1	0.0-2.0
		32-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
I14B:							
Fairdale-----	85	0-7	15-35	7.4-7.8	0-10	0	0
		7-48	10-30	7.4-8.4	5-35	0	0.0-2.0
		48-67	15-30	7.4-7.8	3-10	0	0.0-2.0
		67-80	10-30	7.4-8.4	5-35	0	0.0-2.0
Fluvaquents-----	6	0-16	10-35	6.6-7.8	0-10	0	0
		16-80	5.0-30	6.6-7.8	0-15	0	0.0-2.0
Hapludolls-----	5	0-9	10-35	6.6-7.8	0-10	0	0
		9-60	10-30	7.4-8.4	0-10	0	0
Hapludalfs-----	2	0-6	10-20	6.1-7.8	0-1	0	0
		6-8	5.0-15	6.1-7.8	0-1	0	0
		8-25	15-30	6.6-7.8	0-1	0	0
		25-80	5.0-25	7.4-8.4	5-20	0	0
Zell-----	2	0-6	10-30	6.6-8.4	0-10	0	0
		6-26	5.0-15	7.4-8.4	15-30	0-1	0.0-2.0
		26-60	3.0-15	7.4-8.4	10-30	0-1	0.0-2.0
I14D:							
Fairdale-----	85	0-7	15-30	7.4-7.8	0-10	0	0
		7-48	10-30	7.4-8.4	5-35	0	0.0-2.0
		48-67	15-30	7.4-7.8	3-10	0	0.0-2.0
		67-80	10-30	7.4-8.4	5-35	0	0.0-2.0
Fluvaquents-----	6	0-16	10-35	6.6-7.8	0-10	0	0
		16-80	5.0-30	6.6-7.8	0-15	0	0.0-2.0
Hapludolls-----	4	0-9	10-35	6.6-7.8	0-10	0	0
		9-60	10-30	7.4-8.4	0-10	0	0
Zell-----	3	0-6	10-30	6.6-8.4	0-10	0	0
		6-26	5.0-15	7.4-8.4	15-30	0-1	0.0-2.0
		26-60	3.0-15	7.4-8.4	10-30	0-1	0.0-2.0

Table 24.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity
		In	meq/100 g	pH	Pct	Pct	mmhos/cm
I14D:							
Hapludalfs-----	2	0-6	10-20	6.1-7.8	0-1	0	0
		6-8	5.0-15	6.1-7.8	0-1	0	0
		8-25	15-30	6.6-7.8	0-1	0	0
		25-80	5.0-25	7.4-8.4	5-20	0	0
I15A:							
Flaming-----	70	0-12	5.0-15	5.6-7.3	0	0	0
		12-17	3.0-15	5.6-8.4	0-3	0	0
		17-27	1.0-8.0	5.6-8.4	0-5	0	0
		27-60	1.0-5.0	5.6-8.4	0-10	0	0
Garborg-----	10	0-12	5.0-20	6.1-7.8	0	0	0
		12-41	3.0-10	6.6-8.4	0-1	0	0
		41-59	1.0-5.0	7.4-8.4	5-15	0	0
		59-80	1.0-5.0	7.4-8.4	0-2	0	0
Hamar-----	5	0-12	5.0-25	6.1-7.8	0	0	0
		12-17	3.0-10	6.6-7.8	0-1	0	0
		17-40	1.0-5.0	7.4-7.8	0-2	0	0
		40-47	5.0-15	6.1-7.8	0-2	0	0
		47-60	1.0-5.0	7.4-8.4	0-2	0	0
Ulen-----	5	0-9	10-25	7.4-8.4	5-25	0	0
		9-42	5.0-15	7.4-8.4	15-40	0-1	0.0-2.0
		42-60	1.0-5.0	7.4-8.4	5-25	0-1	0.0-2.0
Poppleton-----	3	0-6	3.0-12	5.6-7.3	0	0	0
		6-9	1.0-6.0	6.1-7.8	0-5	0	0
		9-40	1.0-6.0	6.1-7.8	0-10	0	0
		40-60	1.0-6.0	6.1-7.8	0-15	0	0
Sandberg-----	3	0-12	3.0-15	5.6-7.8	0-5	0	0
		12-19	1.0-5.0	6.1-7.8	0-5	0	0
		19-29	1.0-5.0	7.4-8.4	10-25	0	0
		29-80	1.0-5.0	7.4-8.4	5-10	0	0
Foldahl-----	2	0-12	5.0-15	6.1-7.8	0-5	0	0
		12-30	2.0-10	6.6-7.8	0-10	0	0
		30-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Radium-----	2	0-14	3.0-12	6.1-7.8	0-5	0	0
		14-33	2.0-8.0	6.6-8.4	2-10	0	0
		33-43	1.0-5.0	7.4-8.4	5-15	0	0
		43-80	1.0-5.0	7.4-8.4	5-15	0	0
I16F:							
Fluvaquents-----	55	0-16	10-35	6.6-7.8	0-10	0	0
		16-80	5.0-30	6.6-7.8	0-15	0	0.0-2.0
Hapludolls-----	25	0-9	10-35	6.6-7.8	0-10	0	0
		9-60	10-30	7.4-8.4	0-10	0	0
Hapludalfs-----	7	0-6	10-20	6.1-7.8	0-1	0	0
		6-8	5.0-15	6.1-7.8	0-1	0	0
		8-25	15-30	6.6-7.8	0-1	0	0
		25-80	5.0-25	7.4-8.4	5-20	0	0

Table 24.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity
		In	meq/100 g	pH	Pct	Pct	mmhos/cm
I16F:							
Fairdale-----	5	0-7	15-30	7.4-7.8	0-10	0	0
		7-48	10-30	7.4-8.4	5-35	0	0.0-2.0
		48-67	15-30	7.4-7.8	3-10	0	0.0-2.0
		67-80	10-30	7.4-8.4	5-35	0	0.0-2.0
Water-----	5	---	---	---	---	---	---
Bowstring-----	2	0-38	80-180	5.6-8.4	0-25	0	0
		38-47	10-40	5.6-8.4	0-25	0	0
		47-80	80-180	5.6-8.4	0-25	0	0
Rauville-----	1	0-27	25-60	7.4-8.4	5-15	0	0.0-2.0
		27-45	15-40	7.4-8.4	10-20	0-1	0.0-2.0
		45-60	3.0-30	7.4-8.4	5-20	0-1	0.0-2.0
I17A:							
Foldahl-----	75	0-12	10-25	6.1-7.8	0-5	0	0
		12-30	2.0-10	6.6-7.8	0-10	0	0
		30-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Kratka-----	10	0-11	10-30	5.6-7.8	0	0	0
		11-18	1.0-12	5.6-7.8	0-5	0	0
		18-25	2.0-10	6.6-7.8	0-15	0	0
		25-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Roliss-----	5	0-14	20-40	6.6-8.4	0-10	0	0
		14-20	10-25	7.4-8.4	5-15	0-1	0.0-2.0
		20-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Flaming-----	4	0-12	5.0-15	5.6-7.3	0	0	0
		12-17	3.0-15	5.6-8.4	0-3	0	0
		17-27	1.0-8.0	5.6-8.4	0-5	0	0
		27-60	1.0-5.0	5.6-8.4	0-10	0	0
Grimstad-----	2	0-9	10-25	7.4-8.4	5-15	0	0
		9-22	5.0-15	7.4-8.4	15-30	0-1	0.0-2.0
		22-28	1.0-5.0	7.4-8.4	5-20	0-1	0.0-2.0
		28-60	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Linveltd-----	2	0-9	10-25	6.6-7.8	0	0	0
		9-16	8.0-20	6.6-7.8	0	0	0
		16-29	1.0-5.0	7.4-8.4	0-15	0	0
		29-45	10-25	7.4-8.4	15-25	0-1	0.0-2.0
		45-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Eckvoll-----	1	0-9	3.0-15	6.1-7.3	0	0	0
		9-25	1.0-10	6.1-7.3	0	0	0
		25-32	10-30	6.6-7.8	0	0	0
		32-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Strathcona-----	1	0-10	10-30	7.4-8.4	5-15	0	0
		10-17	5.0-15	7.4-8.4	15-30	0-1	0.0-2.0
		17-28	2.0-8.0	7.4-8.4	5-15	0-1	0.0-2.0
		28-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
I18A:							
Foldahl-----	75	0-12	5.0-15	6.1-7.8	0-5	0	0
		12-30	2.0-10	6.6-7.8	0-10	0	0
		30-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0

Table 24.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity
		In	meq/100 g	pH	Pct	Pct	mmhos/cm
<b>I18A:</b>							
Kratka-----	10	0-11	10-30	5.6-7.8	0	0	0
		11-18	1.0-12	5.6-7.8	0-5	0	0
		18-25	2.0-10	6.6-7.8	0-15	0	0
		25-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Roliss-----	5	0-14	20-40	6.6-8.4	0-10	0	0
		14-20	10-25	7.4-8.4	5-15	0-1	0.0-2.0
		20-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Flaming-----	4	0-12	5.0-15	5.6-7.3	0	0	0
		12-17	3.0-15	5.6-8.4	0-3	0	0
		17-27	1.0-8.0	5.6-8.4	0-5	0	0
		27-60	1.0-5.0	5.6-8.4	0-10	0	0
Grimstad-----	2	0-9	10-25	7.4-8.4	5-15	0	0
		9-22	5.0-15	7.4-8.4	15-30	0-1	0.0-2.0
		22-28	1.0-5.0	7.4-8.4	5-20	0-1	0.0-2.0
		28-60	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Linveltd-----	2	0-9	10-25	6.6-7.8	0	0	0
		9-16	8.0-20	6.6-7.8	0	0	0
		16-29	1.0-5.0	7.4-8.4	0-15	0	0
		29-45	10-25	7.4-8.4	15-25	0-1	0.0-2.0
Eckvoll-----	1	0-9	3.0-15	6.1-7.3	0	0	0
		9-25	1.0-10	6.1-7.3	0	0	0
		25-32	10-30	6.6-7.8	0	0	0
		32-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Strathcona-----	1	0-10	10-30	7.4-8.4	5-15	0	0
		10-17	5.0-15	7.4-8.4	15-30	0-1	0.0-2.0
		17-28	2.0-8.0	7.4-8.4	5-15	0-1	0.0-2.0
		28-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
<b>I19A:</b>							
Foxhome-----	65	0-10	10-25	6.6-7.8	0	0	0
		10-15	1.0-8.0	6.6-7.8	0-10	0	0
		15-23	1.0-5.0	7.4-8.4	5-15	0	0
		23-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Kittson-----	10	0-10	10-35	6.6-7.8	0	0	0
		10-17	10-25	6.6-7.8	0-5	0	0
		17-36	10-25	7.4-8.4	15-25	0-1	0.0-2.0
		36-60	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Strandquist-----	10	0-10	15-30	6.6-8.4	0-10	0	0
		10-20	1.0-5.0	7.4-8.4	5-15	0	0
		20-60	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Foldahl-----	5	0-12	10-25	6.1-7.8	0-5	0	0
		12-30	2.0-10	6.6-7.8	0-10	0	0
		30-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Grimstad-----	5	0-9	10-25	7.4-8.4	5-15	0	0
		9-22	5.0-15	7.4-8.4	15-30	0-1	0.0-2.0
		22-28	1.0-5.0	7.4-8.4	5-20	0-1	0.0-2.0
		28-60	10-20	7.4-8.4	10-20	0-1	0.0-2.0

Table 24.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth		Cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity
		In	meq/100 g	pH	Pct	Pct	mmhos/cm	
<b>I19A:</b>								
Roliss-----	3	0-14	20-40	6.6-8.4	0-10	0	0	
		14-20	10-25	7.4-8.4	5-15	0-1	0.0-2.0	
		20-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0	
Mavie-----	2	0-12	10-30	7.4-8.4	5-15	0	0	
		12-18	5.0-20	7.9-8.4	15-40	0-1	0.0-2.0	
		18-39	1.0-5.0	7.4-8.4	10-25	0-1	0.0-2.0	
		39-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0	
<b>I20A:</b>								
Foxlake-----	75	0-19	20-40	6.6-7.8	0-5	0	0	
		19-38	20-55	7.4-8.4	0-5	0	0	
		38-49	20-50	7.4-8.4	10-30	0-1	0.0-2.0	
		49-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0	
Clearwater-----	5	0-8	30-65	6.6-7.8	0-5	0	0	
		8-35	20-50	7.4-8.4	3-25	0	0	
		35-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0	
Foxlake, very cobbly	5	0-19	20-40	6.6-7.8	0-5	0	0	
		19-38	20-55	7.4-8.4	0-5	0	0	
		38-49	20-50	7.4-8.4	10-30	0-1	0.0-2.0	
		49-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0	
Augsburg-----	3	0-11	10-30	7.4-8.4	5-25	0	0	
		11-18	5.0-20	7.4-8.4	15-40	0-1	0.0-2.0	
		18-33	3.0-15	7.4-8.4	10-30	0-1	0.0-2.0	
		33-60	20-50	7.4-8.4	10-30	0-1	0.0-2.0	
Clearwater, depressional-----	3	0-8	20-60	6.6-7.8	0-5	0	0	
		8-35	20-55	7.4-8.4	3-25	0	0	
		35-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0	
Espelie-----	3	0-9	10-30	6.6-7.3	0	0	0	
		9-24	2.0-8.0	6.6-7.8	0-10	0	0	
		24-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0	
Hilaire-----	2	0-10	10-25	6.6-7.3	0-5	0	0	
		10-34	2.0-8.0	6.6-7.8	0-10	0	0	
		34-80	20-50	7.4-8.4	10-30	0-1	0.0-1.0	
Reis-----	2	0-9	30-65	7.4-8.4	5-20	0	0	
		9-17	25-65	7.4-8.4	15-25	0	0	
		17-33	25-50	7.4-8.4	15-30	0-1	0.0-2.0	
		33-42	25-60	7.4-8.4	15-30	0-1	0.0-2.0	
		42-60	20-50	7.4-8.4	10-30	0-1	0.0-2.0	
		60-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0	
Wheatville-----	2	0-9	10-25	7.4-8.4	5-25	0	0	
		9-31	5.0-20	7.4-8.4	15-40	0-1	0.0-2.0	
		31-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0	
<b>I21A:</b>								
Fram-----	85	0-7	10-25	7.4-8.4	3-15	0	0	
		7-38	5.0-15	7.4-8.4	15-30	0-1	0.0-2.0	
		38-60	5.0-15	7.4-8.4	10-25	0-1	0.0-2.0	

Table 24.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity
		In	meq/100 g	pH	Pct	Pct	mmhos/cm
<b>I21A:</b>							
Hedman-----	12	0-11	15-30	6.6-7.8	3-15	0	0
		11-20	5.0-15	7.4-8.4	15-30	0-1	0.0-2.0
		20-80	5.0-15	7.4-8.4	10-25	0-1	0.0-2.0
Strathcona-----	2	0-10	10-30	7.4-8.4	5-15	0	0
		10-17	5.0-15	7.4-8.4	15-30	0-1	0.0-2.0
		17-28	2.0-8.0	7.4-8.4	5-15	0-1	0.0-2.0
		28-80	5.0-15	7.4-8.4	10-25	0-1	0.0-2.0
Foxhome-----	1	0-10	10-25	6.6-7.8	0	0	0
		10-15	1.0-8.0	6.6-7.8	0-10	0	0
		15-23	1.0-5.0	7.4-8.4	5-15	0	0
		23-80	5.0-15	7.4-8.4	10-25	0-1	0.0-2.0
<b>I22A:</b>							
Glyndon-----	75	0-11	10-30	7.4-8.4	5-25	0	0
		11-28	5.0-15	7.4-8.4	15-40	0-1	0.0-2.0
		28-60	3.0-15	7.4-8.4	10-30	0-1	0.0-2.0
Borup-----	10	0-12	10-30	7.4-8.4	5-25	0	0
		12-34	5.0-15	7.4-8.4	15-40	0-1	0.0-2.0
		34-60	3.0-15	7.4-8.4	10-30	0-1	0.0-2.0
Augsburg-----	5	0-11	10-30	7.4-8.4	5-25	0	0
		11-18	5.0-20	7.4-8.4	15-40	0-1	0.0-2.0
		18-33	3.0-15	7.4-8.4	10-30	0-1	0.0-2.0
		33-60	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Ulen-----	5	0-9	10-25	7.4-8.4	5-25	0	0
		9-42	5.0-15	7.4-8.4	15-40	0-1	0.0-2.0
		42-60	1.0-5.0	7.4-8.4	5-25	0-1	0.0-2.0
Wheatville-----	3	0-9	10-25	7.4-8.4	5-25	0	0
		9-31	5.0-20	7.4-8.4	15-40	0-1	0.0-2.0
		31-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Flaming-----	2	0-12	5.0-15	5.6-7.3	0	0	0
		12-17	3.0-15	5.6-8.4	0-3	0	0
		17-27	1.0-8.0	5.6-8.4	0-5	0	0
		27-60	1.0-5.0	5.6-8.4	0-10	0	0
<b>I23A:</b>							
Glyndon-----	75	0-11	10-25	7.4-8.4	5-25	0	0
		11-28	5.0-15	7.4-8.4	15-40	0-1	0.0-2.0
		28-60	3.0-15	7.4-8.4	10-30	0-1	0.0-2.0
Borup-----	10	0-12	10-30	7.4-8.4	10-25	0	0
		12-34	5.0-15	7.4-8.4	15-40	0-1	0.0-2.0
		34-60	3.0-15	7.4-8.4	10-30	0-1	0.0-2.0
Augsburg-----	5	0-11	10-30	7.4-8.4	5-25	0	0
		11-18	5.0-20	7.4-8.4	15-40	0-1	0.0-2.0
		18-33	3.0-15	7.4-8.4	10-30	0-1	0.0-2.0
		33-60	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Ulen-----	5	0-9	5.0-15	7.4-8.4	5-25	0	0
		9-42	5.0-15	7.4-8.4	15-40	0-1	0.0-2.0
		42-60	1.0-5.0	7.4-8.4	5-25	0-1	0.0-2.0

Table 24.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity
		In	meq/100 g	pH	Pct	Pct	mmhos/cm
I23A:							
Wheatville-----	3	0-9	10-25	7.4-8.4	5-25	0	0
		9-31	5.0-20	7.4-8.4	15-40	0-1	0.0-2.0
		31-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Flaming-----	2	0-12	5.0-15	5.6-7.3	0	0	0
		12-17	3.0-15	5.6-8.4	0-3	0	0
		17-27	1.0-8.0	5.6-8.4	0-5	0	0
		27-60	1.0-5.0	5.6-8.4	0-10	0	0
I24A:							
Grimstad-----	70	0-9	10-25	7.4-8.4	5-15	0	0
		9-22	5.0-15	7.4-8.4	15-30	0-1	0.0-2.0
		22-28	1.0-5.0	7.4-8.4	5-20	0-1	0.0-2.0
		28-60	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Strathcona-----	12	0-10	10-30	7.4-8.4	5-15	0	0
		10-17	5.0-15	7.4-8.4	15-30	0-1	0.0-2.0
		17-28	2.0-8.0	7.4-8.4	5-15	0-1	0.0-2.0
		28-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Foldahl-----	5	0-12	10-25	6.1-7.8	0-5	0	0
		12-30	2.0-10	6.6-7.8	0-10	0	0
		30-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Hamerly-----	5	0-8	15-35	6.6-8.4	0-25	0	0
		8-25	10-25	7.4-8.4	15-35	0-1	0.0-2.0
		25-60	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Foxhome-----	2	0-10	10-25	6.6-7.8	0	0	0
		10-15	1.0-8.0	6.6-7.8	0-10	0	0
		15-23	1.0-5.0	7.4-8.4	5-15	0	0
		23-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Karlsruhe-----	2	0-15	10-25	6.6-8.4	5-20	0	0
		15-30	3.0-15	7.4-8.4	15-35	0-1	0
		30-60	1.0-5.0	7.4-8.4	10-25	0	0
Mavie-----	2	0-12	10-30	7.4-8.4	5-15	0	0
		12-18	5.0-20	7.9-8.4	15-40	0-1	0.0-2.0
		18-39	1.0-5.0	7.4-8.4	10-25	0-1	0.0-2.0
		39-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Ulen-----	2	0-9	10-25	7.4-8.4	5-25	0	0
		9-42	5.0-15	7.4-8.4	15-40	0-1	0.0-2.0
		42-60	1.0-5.0	7.4-8.4	5-25	0-1	0.0-2.0
I25A:							
Hamar-----	75	0-12	5.0-25	6.1-7.8	0	0	0
		12-17	3.0-10	6.6-7.8	0-1	0	0
		17-40	1.0-5.0	7.4-7.8	0-2	0	0
		40-47	5.0-15	6.1-7.8	0-2	0	0
		47-60	1.0-5.0	7.4-8.4	0-2	0	0
Garborg-----	10	0-12	5.0-20	6.1-7.8	0	0	0
		12-41	3.0-10	6.6-8.4	0-1	0	0
		41-59	1.0-5.0	7.4-8.4	5-15	0	0
		59-80	1.0-5.0	7.4-8.4	0-2	0	0

Table 24.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity
		In	meq/100 g	pH	Pct	Pct	mmhos/cm
<b>I25A:</b>							
Rosewood-----	7	0-8	10-25	7.4-8.4	5-25	0	0
		8-18	2.0-10	7.4-8.4	15-40	0-1	0.0-2.0
		18-80	1.0-5.0	7.4-8.4	5-25	0-1	0.0-2.0
Venlo-----	3	0-13	15-40	6.1-7.3	0	0	0
		13-60	1.0-5.0	6.6-8.4	0-10	0	0.0-2.0
Flaming-----	2	0-12	5.0-15	5.6-7.3	0	0	0
		12-17	3.0-15	5.6-8.4	0-3	0	0
		17-27	1.0-8.0	5.6-8.4	0-5	0	0
		27-60	1.0-5.0	5.6-8.4	0-10	0	0
Hangaard-----	2	0-10	10-25	6.6-7.8	0	0	0
		10-15	5.0-20	6.6-7.8	0-5	0	0
		15-80	1.0-5.0	7.4-8.4	5-15	0	0
Kratka-----	1	0-11	10-30	5.6-7.8	0	0	0
		11-18	1.0-12	5.6-7.8	0-5	0	0
		18-25	2.0-10	6.6-7.8	0-15	0	0
		25-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
<b>I26A:</b>							
Hamerly-----	75	0-8	15-35	6.6-8.4	0-25	0	0
		8-25	10-25	7.4-8.4	15-35	0-1	0.0-2.0
		25-60	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Vallers-----	12	0-12	20-40	7.4-8.4	10-20	0	0
		12-21	10-25	7.4-8.4	15-35	0-1	0.0-2.0
		21-60	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Foxhome-----	3	0-10	10-25	6.6-7.8	0	0	0
		10-15	1.0-8.0	6.6-7.8	0-10	0	0
		15-23	1.0-5.0	7.4-8.4	5-15	0	0
		23-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Grimstad-----	3	0-9	10-25	7.4-8.4	5-15	0	0
		9-22	5.0-15	7.4-8.4	15-30	0-1	0.0-2.0
		22-28	1.0-5.0	7.4-8.4	5-20	0-1	0.0-2.0
		28-60	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Hamerly, very cobbly	3	0-8	15-35	6.6-8.4	0-25	0	0
		8-25	10-25	7.4-8.4	15-35	0-1	0.0-2.0
		25-60	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Strathcona-----	3	0-10	10-30	7.4-8.4	5-15	0	0
		10-17	5.0-15	7.4-8.4	15-30	0-1	0.0-2.0
		17-28	2.0-8.0	7.4-8.4	5-15	0-1	0.0-2.0
		28-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Roliss, depressional	1	0-14	15-50	6.6-8.4	0-10	0	0
		14-20	10-25	7.4-8.4	5-15	0-1	0.0-2.0
		20-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
<b>I27A:</b>							
Hamre-----	80	0-13	120-180	5.1-7.8	0-5	0	0
		13-18	15-35	5.1-7.8	0-10	0	0
		18-71	10-20	6.6-8.4	5-20	0	0
		71-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0

Table 24.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity
		In	meq/100 g	pH	Pct	Pct	mmhos/cm
<b>I27A:</b>							
Northwood-----	5	0-9	120-180	5.1-7.8	0	0	0
		9-14	5.0-20	5.6-7.8	0-5	0	0
		14-24	1.0-5.0	5.6-8.4	0-15	0	0
		24-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Roliss-----	5	0-14	20-40	6.6-8.4	0-10	0	0
		14-20	10-25	7.4-8.4	5-15	0-1	0.0-2.0
		20-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Smiley-----	5	0-12	10-25	6.6-7.8	0-5	0	0
		12-19	10-30	6.6-8.4	0-10	0	0
		19-42	10-25	7.4-8.4	15-30	0-1	0.0-2.0
		42-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Cathro-----	3	0-11	120-180	4.5-7.8	0	0	0
		11-23	120-180	4.5-7.8	0	0	0
		23-60	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Kratka-----	2	0-11	10-30	5.6-7.8	0	0	0
		11-18	1.0-12	5.6-7.8	0-5	0	0
		18-25	2.0-10	6.6-7.8	0-15	0	0
		25-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
<b>I28A:</b>							
Hangaard-----	75	0-10	10-25	6.6-7.8	0	0	0
		10-15	5.0-20	6.6-7.8	0-5	0	0
		15-80	1.0-5.0	7.4-8.4	5-15	0	0
Hamar-----	7	0-12	5.0-25	6.1-7.8	0	0	0
		12-17	3.0-10	6.6-7.8	0-1	0	0
		17-40	1.0-5.0	7.4-7.8	0-2	0	0
		40-47	5.0-15	6.1-7.8	0-2	0	0
		47-60	1.0-5.0	7.4-8.4	0-2	0	0
Syrene-----	7	0-9	10-25	7.4-8.4	5-20	0	0
		9-17	5.0-25	7.9-8.4	15-35	0-1	0.0-2.0
		17-27	1.0-5.0	7.4-8.4	10-30	0-1	0.0-2.0
		27-60	1.0-5.0	7.4-8.4	5-15	0	0.0-2.0
Karlsruhe-----	3	0-15	10-25	6.6-8.4	5-20	0	0
		15-30	3.0-15	7.4-8.4	15-35	0-1	0
		30-60	1.0-5.0	7.4-8.4	10-25	0	0
Rosewood-----	3	0-8	10-25	7.4-8.4	5-25	0	0
		8-18	2.0-10	7.4-8.4	15-40	0-1	0.0-2.0
		18-80	1.0-5.0	7.4-8.4	5-25	0-1	0.0-2.0
Strandquist-----	3	0-10	15-30	6.6-8.4	0-10	0	0
		10-20	1.0-5.0	7.4-8.4	5-15	0	0
		20-60	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Deerwood-----	2	0-10	100-180	5.6-7.8	0-5	0	0
		10-12	5.0-20	6.1-8.4	0-15	0	0
		12-60	1.0-5.0	7.4-8.4	10-20	0	0
<b>I29A:</b>							
Hattie-----	75	0-8	30-55	7.4-8.4	0-5	0	0
		8-22	20-55	7.4-8.4	5-25	0-1	0.0-2.0
		22-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0

Table 24.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity
		In	meq/100 g	pH	Pct	Pct	mmhos/cm
<b>I29A:</b>							
Clearwater-----	12	0-8	30-65	6.6-7.8	0-5	0	0
		8-35	20-50	7.4-8.4	3-25	0	0
		35-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Reis-----	6	0-9	30-65	7.4-8.4	5-20	0	0
		9-17	25-65	7.4-8.4	15-25	0	0
		17-33	25-50	7.4-8.4	15-30	0-1	0.0-2.0
		33-42	25-60	7.4-8.4	15-30	0-1	0.0-2.0
		42-60	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Hattie, very cobbly--	5	0-8	30-55	7.4-8.4	0-5	0	0
		8-22	20-55	7.4-8.4	5-25	0-1	0.0-2.0
		22-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Hilaire-----	2	0-10	10-25	6.6-7.3	0-5	0	0
		10-34	2.0-8.0	6.6-7.8	0-10	0	0
		34-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
<b>I29D:</b>							
Hattie-----	85	0-8	30-55	7.4-8.4	0-5	0	0
		8-22	20-55	7.4-8.4	5-25	0-1	0.0-2.0
		22-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Clearwater-----	6	0-8	30-65	6.6-7.8	0-5	0	0
		8-35	20-50	7.4-8.4	3-25	0	0
		35-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Hattie, level-----	5	0-8	30-55	7.4-8.4	0-5	0	0
		8-22	20-55	7.4-8.4	5-25	0-1	0.0-2.0
		22-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Boyerlake-----	4	0-7	25-55	7.4-8.4	2-10	0	0
		7-37	20-55	7.4-8.4	15-25	0-1	0.0-2.0
		37-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
<b>I30A:</b>							
Hedman-----	85	0-11	15-30	6.6-7.8	3-15	0	0
		11-20	5.0-15	7.4-8.4	15-30	0-1	0.0-2.0
		20-80	5.0-15	7.4-8.4	10-25	0-1	0.0-2.0
Fram-----	5	0-7	10-25	7.4-8.4	3-15	0	0
		7-38	5.0-15	7.4-8.4	15-30	0-1	0.0-2.0
		38-60	5.0-15	7.4-8.4	10-25	0-1	0.0-2.0
Strathcona-----	5	0-10	10-30	7.4-8.4	5-15	0	0
		10-17	5.0-15	7.4-8.4	15-30	0-1	0.0-2.0
		17-28	2.0-8.0	7.4-8.4	5-15	0-1	0.0-2.0
		28-80	5.0-15	7.4-8.4	10-25	0-1	0.0-2.0
Haug-----	3	0-10	100-180	6.6-7.8	0-5	0	0
		10-14	15-40	6.6-8.4	5-25	0	0
		14-60	5.0-15	7.4-8.4	10-25	0-1	0.0-2.0
Strandquist-----	2	0-10	15-30	6.6-8.4	0-10	0	0
		10-20	1.0-5.0	7.4-8.4	5-15	0	0
		20-60	5.0-15	7.4-8.4	10-25	0-1	0.0-2.0

Table 24.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity
		In	meq/100 g	pH	Pct	Pct	mmhos/cm
<b>I31A:</b>							
Hedman-----	50	0-11	15-30	6.6-7.8	3-15	0	0
		11-20	5.0-15	7.4-8.4	15-30	0-1	0.0-2.0
		20-80	5.0-15	7.4-8.4	10-25	0-1	0.0-2.0
Fram-----	40	0-7	10-25	7.4-8.4	3-15	0	0
		7-38	5.0-15	7.4-8.4	15-30	0-1	0.0-2.0
		38-60	5.0-15	7.4-8.4	10-25	0-1	0.0-2.0
Strathcona-----	5	0-10	10-30	7.4-8.4	5-15	0	0
		10-17	5.0-15	7.4-8.4	15-30	0-1	0.0-2.0
		17-28	2.0-8.0	7.4-8.4	5-15	0-1	0.0-2.0
		28-80	5.0-15	7.4-8.4	10-25	0-1	0.0-2.0
Haug-----	3	0-10	100-180	6.6-7.8	0-5	0	0
		10-14	15-40	6.6-8.4	5-25	0	0
		14-60	5.0-15	7.4-8.4	10-25	0-1	0.0-2.0
Strandquist-----	2	0-10	15-30	6.6-8.4	0-10	0	0
		10-20	1.0-5.0	7.4-8.4	5-15	0	0
		20-60	5.0-15	7.4-8.4	10-25	0-1	0.0-2.0
<b>I32A:</b>							
Hilaire-----	75	0-10	10-25	6.6-7.3	0-5	0	0
		10-34	2.0-8.0	6.6-7.8	0-10	0	0
		34-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Espelie-----	12	0-9	10-30	6.6-7.3	0	0	0
		9-24	2.0-8.0	6.6-7.8	0-10	0	0
		24-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Huot-----	5	0-14	5.0-25	7.4-8.4	5-25	0	0
		14-26	5.0-15	7.4-8.4	15-40	0-1	0.0-2.0
		26-34	1.0-5.0	7.4-8.4	5-20	0-1	0.0-2.0
		34-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Flaming-----	2	0-12	5.0-15	5.6-7.3	0	0	0
		12-17	3.0-15	5.6-8.4	0-3	0	0
		17-27	1.0-8.0	5.6-8.4	0-5	0	0
		27-60	1.0-5.0	5.6-8.4	0-10	0	0
Foxlake-----	2	0-19	20-40	6.6-7.8	0-5	0	0
		19-38	20-55	7.4-8.4	0-5	0	0
		38-49	20-50	7.4-8.4	10-30	0-1	0.0-2.0
		49-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Wheatville-----	2	0-9	10-25	7.4-8.4	5-25	0	0
		9-31	5.0-20	7.4-8.4	15-40	0-1	0.0-2.0
		31-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Thiefriver-----	1	0-12	10-30	7.4-8.4	5-25	0	0
		12-23	5.0-15	7.4-8.4	15-40	0-1	0.0-2.0
		23-32	1.0-5.0	7.4-8.4	5-20	0-1	0.0-2.0
		32-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Wyandotte-----	1	0-8	30-40	7.4-7.8	5-20	0	0
		8-15	10-20	7.9-8.4	15-25	0-1	0.0-2.0
		15-34	1.0-5.0	7.4-8.4	5-20	0-1	0.0-2.0
		34-60	20-50	7.4-8.4	10-30	0-1	0.0-2.0

Table 24.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity
		In	meq/100 g	pH	Pct	Pct	mmhos/cm
<b>I33A:</b>							
Hilaire-----	75	0-10	5.0-15	6.6-7.3	0-5	0	0
		10-34	2.0-8.0	6.6-7.8	0-10	0	0
		34-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Espelie-----	12	0-9	10-30	6.6-7.3	0	0	0
		9-24	2.0-8.0	6.6-7.8	0-10	0	0
		24-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Huot-----	5	0-14	5.0-25	7.4-8.4	5-25	0	0
		14-26	5.0-15	7.4-8.4	15-40	0-1	0.0-2.0
		26-34	1.0-5.0	7.4-8.4	5-20	0-1	0.0-2.0
		34-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Flaming-----	2	0-12	5.0-15	5.6-7.3	0	0	0
		12-17	3.0-15	5.6-8.4	0-3	0	0
		17-27	1.0-8.0	5.6-8.4	0-5	0	0
		27-60	1.0-5.0	5.6-8.4	0-10	0	0
Foxlake-----	2	0-19	20-40	6.6-7.8	0-5	0	0
		19-38	20-55	7.4-8.4	0-5	0	0
		38-49	20-50	7.4-8.4	10-30	0-1	0.0-2.0
		49-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Wheatville-----	2	0-9	10-25	7.4-8.4	5-25	0	0
		9-31	5.0-20	7.4-8.4	15-40	0-1	0.0-2.0
		31-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Thiefriever-----	1	0-12	10-30	7.4-8.4	5-25	0	0
		12-23	5.0-15	7.4-8.4	15-40	0-1	0.0-2.0
		23-32	1.0-5.0	7.4-8.4	5-20	0-1	0.0-2.0
		32-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Wyandotte-----	1	0-8	30-40	7.4-7.8	5-20	0	0
		8-15	10-20	7.9-8.4	15-25	0-1	0.0-2.0
		15-34	1.0-5.0	7.4-8.4	5-20	0-1	0.0-2.0
		34-60	20-50	7.4-8.4	10-30	0-1	0.0-2.0
<b>I34A:</b>							
Huot-----	75	0-14	5.0-25	7.4-8.4	5-25	0	0
		14-26	5.0-15	7.4-8.4	15-40	0-1	0.0-2.0
		26-34	1.0-5.0	7.4-8.4	5-20	0-1	0.0-2.0
		34-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Thiefriever-----	12	0-12	10-30	7.4-8.4	5-25	0	0
		12-23	5.0-15	7.4-8.4	15-40	0-1	0.0-2.0
		23-32	1.0-5.0	7.4-8.4	5-20	0-1	0.0-2.0
		32-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Hilaire-----	5	0-10	10-25	6.6-7.3	0-5	0	0
		10-34	2.0-8.0	6.6-7.8	0-10	0	0
		34-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Flaming-----	3	0-12	5.0-15	5.6-7.3	0	0	0
		12-17	3.0-15	5.6-8.4	0-3	0	0
		17-27	1.0-8.0	5.6-8.4	0-5	0	0
		27-60	1.0-5.0	5.6-8.4	0-10	0	0

Table 24.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity
		In	meq/100 g	pH	Pct	Pct	mmhos/cm
I34A:							
Foxlake-----	3	0-19	20-40	6.6-7.8	0-5	0	0
		19-38	20-55	7.4-8.4	0-5	0	0
		38-49	20-50	7.4-8.4	10-30	0-1	0.0-2.0
		49-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Ulen-----	2	0-9	10-25	7.4-8.4	5-25	0	0
		9-42	5.0-15	7.4-8.4	15-40	0-1	0.0-2.0
		42-60	1.0-5.0	7.4-8.4	5-25	0-1	0.0-2.0
I35A:							
Karlsruhe-----	70	0-15	10-25	6.6-8.4	5-20	0	0
		15-30	3.0-15	7.4-8.4	15-35	0-1	0
		30-60	1.0-5.0	7.4-8.4	10-25	0	0
Syrene-----	10	0-9	10-25	7.4-8.4	5-20	0	0
		9-17	5.0-25	7.9-8.4	15-35	0-1	0.0-2.0
		17-27	1.0-5.0	7.4-8.4	10-30	0-1	0.0-2.0
		27-60	1.0-5.0	7.4-8.4	5-15	0	0.0-2.0
Ulen-----	10	0-9	5.0-15	7.4-8.4	5-25	0	0
		9-42	5.0-15	7.4-8.4	15-40	0-1	0.0-2.0
		42-60	1.0-5.0	7.4-8.4	5-25	0-1	0.0-2.0
Radium-----	5	0-14	3.0-12	6.1-7.8	0-5	0	0
		14-33	2.0-8.0	6.6-8.4	2-10	0	0
		33-43	1.0-5.0	7.4-8.4	5-15	0	0
		43-80	1.0-5.0	7.4-8.4	5-15	0	0
Rosewood-----	3	0-8	10-25	7.4-8.4	5-25	0	0
		8-18	2.0-10	7.4-8.4	15-40	0-1	0.0-2.0
		18-80	1.0-5.0	7.4-8.4	5-25	0-1	0.0-2.0
Sandberg-----	2	0-12	3.0-15	5.6-7.8	0-5	0	0
		12-19	1.0-5.0	6.1-7.8	0-5	0	0
		19-29	1.0-5.0	7.4-8.4	10-25	0	0
		29-80	1.0-5.0	7.4-8.4	5-10	0	0
I36A:							
Kittson-----	70	0-10	10-35	6.6-7.8	0	0	0
		10-17	10-25	6.6-7.8	0-5	0	0
		17-36	10-25	7.4-8.4	15-25	0-1	0.0-2.0
		36-60	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Roliss-----	12	0-14	20-40	6.6-8.4	0-10	0	0
		14-20	10-25	7.4-8.4	5-15	0-1	0.0-2.0
		20-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Hamerly-----	5	0-8	15-35	6.6-8.4	0-25	0	0
		8-25	10-25	7.4-8.4	15-35	0-1	0.0-2.0
		25-60	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Kratka-----	5	0-11	10-30	5.6-7.8	0	0	0
		11-18	1.0-12	5.6-7.8	0-5	0	0
		18-25	2.0-10	6.6-7.8	0-15	0	0
		25-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0

Table 24.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity
		In	meq/100 g	pH	Pct	Pct	mmhos/cm
<b>I36A:</b>							
Grimstad-----	3	0-9	10-25	7.4-8.4	5-15	0	0
		9-22	5.0-15	7.4-8.4	15-30	0-1	0.0-2.0
		22-28	1.0-5.0	7.4-8.4	5-20	0-1	0.0-2.0
		28-60	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Strandquist-----	3	0-10	15-30	6.6-8.4	0-10	0	0
		10-20	1.0-5.0	7.4-8.4	5-15	0	0
		20-60	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Foxhome-----	2	0-10	10-25	6.6-7.8	0	0	0
		10-15	1.0-8.0	6.6-7.8	0-10	0	0
		15-23	1.0-5.0	7.4-8.4	5-15	0	0
		23-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
<b>I37A:</b>							
Kratka, depressional	45	0-11	10-40	6.6-7.8	0	0	0
		11-18	1.0-12	5.6-7.8	0-5	0	0
		18-25	2.0-10	6.6-7.8	0-15	0	0
		25-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Strathcona, depressional-----	45	0-10	10-45	7.4-8.4	5-15	0	0
		10-17	5.0-15	7.4-8.4	15-30	0-1	0.0-2.0
		17-28	2.0-8.0	7.4-8.4	5-15	0-1	0.0-2.0
		28-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Northwood-----	5	0-9	120-180	5.1-7.8	0	0	0
		9-14	5.0-20	5.6-7.8	0-5	0	0
		14-24	1.0-5.0	5.6-8.4	0-15	0	0
		24-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Kratka-----	2	0-11	10-30	5.6-7.8	0	0	0
		11-18	1.0-12	5.6-7.8	0-5	0	0
		18-25	2.0-10	6.6-7.8	0-15	0	0
		25-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Strathcona-----	2	0-10	10-30	7.4-8.4	5-15	0	0
		10-17	5.0-15	7.4-8.4	15-30	0	0.0-2.0
		17-28	2.0-8.0	7.4-8.4	5-15	0	0.0-2.0
		28-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Roliss-----	1	0-14	20-40	6.6-8.4	0-10	0	0
		14-20	10-25	7.4-8.4	5-15	0-1	0.0-2.0
		20-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
<b>I38A:</b>							
Kratka-----	70	0-11	10-30	5.6-7.8	0	0	0
		11-18	1.0-12	5.6-7.8	0-5	0	0
		18-25	2.0-10	6.6-7.8	0-15	0	0
		25-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Smiley-----	7	0-12	10-25	6.6-7.8	0-5	0	0
		12-19	10-30	6.6-8.4	0-10	0	0
		19-42	10-25	7.4-8.4	15-30	0-1	0.0-2.0
		42-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Foldahl-----	5	0-12	10-25	6.1-7.8	0-5	0	0
		12-30	2.0-10	6.6-7.8	0-10	0	0
		30-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0

Table 24.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity
		In	meq/100 g	pH	Pct	Pct	mmhos/cm
<b>I38A:</b>							
Kratka, very cobbly--	5	0-11	10-30	5.6-7.8	0	0	0
		11-18	1.0-12	5.6-7.8	0-5	0	0
		18-25	2.0-10	6.6-7.8	0-15	0	0
		25-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Strathcona-----	5	0-10	10-30	7.4-8.4	5-15	0	0
		10-17	5.0-15	7.4-8.4	15-30	0	0.0-2.0
		17-28	2.0-8.0	7.4-8.4	5-15	0	0.0-2.0
		28-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Kratka, depressional	3	0-11	10-40	6.6-7.8	0	0	0
		11-18	1.0-12	5.6-7.8	0-5	0	0
		18-25	2.0-10	6.6-7.8	0-15	0	0
		25-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Strandquist-----	3	0-10	15-30	6.6-8.4	0-10	0	0
		10-20	1.0-5.0	7.4-8.4	5-15	0	0
		20-60	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Linveltd-----	2	0-9	10-25	6.6-7.8	0	0	0
		9-16	8.0-20	6.6-7.8	0	0	0
		16-29	1.0-5.0	7.4-8.4	0-15	0	0
		29-45	10-25	7.4-8.4	15-25	0-1	0.0-2.0
		45-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
<b>I39A:</b>							
Linveltd-----	65	0-9	10-25	6.6-7.8	0	0	0
		9-16	8.0-20	6.6-7.8	0	0	0
		16-29	1.0-5.0	7.4-8.4	0-15	0	0
		29-45	10-25	7.4-8.4	15-25	0-1	0.0-2.0
		45-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Kratka-----	14	0-11	10-30	5.6-7.8	0	0	0
		11-18	1.0-12	5.6-7.8	0-5	0	0
		18-25	2.0-10	6.6-7.8	0-15	0	0
		25-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Reiner-----	10	0-7	5.0-25	6.6-7.3	0	0	0
		7-17	15-30	6.6-7.3	0-10	0	0
		17-35	10-25	7.4-8.4	15-25	0-1	0.0-2.0
		35-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Smiley-----	5	0-12	10-25	6.6-7.8	0-5	0	0
		12-19	10-30	6.6-8.4	0-10	0	0
		19-42	10-25	7.4-8.4	15-30	0-1	0.0-2.0
		42-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Eckvoll-----	3	0-9	3.0-15	6.1-7.3	0	0	0
		9-25	1.0-10	6.1-7.3	0	0	0
		25-32	10-30	6.6-7.8	0	0	0
		32-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Foldahl-----	2	0-12	10-25	6.1-7.8	0-5	0	0
		12-30	2.0-10	6.6-7.8	0-10	0	0
		30-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Pelan-----	1	0-6	5.0-25	6.1-7.3	0	0	0
		6-9	1.0-10	6.1-7.3	0	0	0
		9-14	10-20	6.1-7.8	0	0	0
		14-20	1.0-5.0	7.4-8.4	0-15	0	0
		20-60	10-20	7.4-8.4	10-20	0-1	0.0-2.0

Table 24.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity
		In	meq/100 g	pH	Pct	Pct	mmhos/cm
<b>I40B:</b>							
Maddock-----	85	0-10	3.0-15	6.6-7.8	0-3	0	0
		10-14	1.0-8.0	6.6-8.4	0-5	0	0
		14-60	1.0-5.0	6.6-8.4	0-5	0	0
Flaming-----	5	0-12	5.0-15	5.6-7.3	0	0	0
		12-17	3.0-15	5.6-8.4	0-3	0	0
		17-27	1.0-8.0	5.6-8.4	0-5	0	0
		27-60	1.0-5.0	5.6-8.4	0-10	0	0
Sandberg-----	5	0-12	3.0-15	5.6-7.8	0-5	0	0
		12-19	1.0-5.0	6.1-7.8	0-5	0	0
		19-29	1.0-5.0	7.4-8.4	10-25	0	0
		29-80	1.0-5.0	7.4-8.4	5-10	0	0
Halverson-----	3	0-10	3.0-15	5.6-7.3	0	0	0
		10-23	1.0-10	5.6-7.3	0	0	0
		23-35	10-30	6.1-7.8	0	0	0
		35-55	5.0-15	7.4-8.4	15-30	0	0
		55-80	5.0-15	7.4-8.4	10-25	0	0
Hamar-----	2	0-12	5.0-25	6.1-7.8	0	0	0
		12-17	3.0-10	6.6-7.8	0-1	0	0
		17-40	1.0-5.0	7.4-7.8	0-2	0	0
		40-47	5.0-15	6.1-7.8	0-2	0	0
		47-60	1.0-5.0	7.4-8.4	0-2	0	0
<b>I40F:</b>							
Maddock-----	90	0-10	3.0-15	6.6-7.8	0-3	0	0
		10-14	1.0-8.0	6.6-8.4	0-5	0	0
		14-60	1.0-5.0	6.6-8.4	0-5	0	0
Flaming-----	5	0-12	5.0-15	5.6-7.3	0	0	0
		12-17	3.0-15	5.6-8.4	0-3	0	0
		17-27	1.0-8.0	5.6-8.4	0-5	0	0
		27-60	1.0-5.0	5.6-8.4	0-10	0	0
Sandberg-----	5	0-12	3.0-15	5.6-7.8	0-5	0	0
		12-19	1.0-5.0	6.1-7.8	0-5	0	0
		19-29	1.0-5.0	7.4-8.4	10-25	0	0
		29-80	1.0-5.0	7.4-8.4	5-10	0	0
<b>I41A:</b>							
Markey-----	80	0-32	120-180	4.5-7.8	0	0	0
		32-60	1.0-5.0	5.6-8.4	0-5	0	0
Deerwood-----	12	0-10	100-180	5.6-7.8	0-5	0	0
		10-12	5.0-20	6.1-8.4	0-15	0	0
		12-60	1.0-5.0	7.4-8.4	10-20	0	0
Berner-----	2	0-28	120-180	5.6-7.3	0	0	0
		28-31	5.0-20	6.1-7.3	0	0	0
		31-44	1.0-5.0	6.1-7.8	0-5	0	0
		44-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Hamar-----	2	0-12	5.0-25	6.1-7.8	0	0	0
		12-17	3.0-10	6.6-7.8	0-1	0	0
		17-40	1.0-5.0	7.4-7.8	0-2	0	0
		40-47	5.0-15	6.1-7.8	0-2	0	0
		47-60	1.0-5.0	7.4-8.4	0-2	0	0

Table 24.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity
		In	meq/100 g	pH	Pct	Pct	mmhos/cm
<b>I41A:</b>							
Seelyeville-----	2	0-10	120-200	4.5-7.3	0	0	0
		10-80	140-200	4.5-7.3	0	0	0
Syrene-----	2	0-9	10-25	7.4-8.4	5-20	0	0
		9-17	5.0-25	7.9-8.4	15-35	0-1	0.0-2.0
		17-27	1.0-5.0	7.4-8.4	10-30	0-1	0.0-2.0
		27-60	1.0-5.0	7.4-8.4	5-15	0	0.0-2.0
<b>I42A:</b>							
Markey, ponded-----	85	0-32	120-180	4.5-7.8	0	0	0
		32-60	1.0-5.0	5.6-8.4	0-5	0	0
Markey-----	5	0-32	120-180	4.5-7.8	0	0	0
		32-60	1.0-5.0	5.6-8.4	0-5	0	0
Deerwood-----	4	0-10	100-180	5.6-7.8	0-5	0	0
		10-12	5.0-20	6.1-8.4	0-15	0	0
		12-60	1.0-5.0	7.4-8.4	10-20	0	0
Seelyeville, ponded--	4	0-10	120-200	4.5-7.3	0	0	0
		10-80	140-200	4.5-7.3	0	0	0
Hamar-----	1	0-12	5.0-25	6.1-7.8	0	0	0
		12-17	3.0-10	6.6-7.8	0-1	0	0
		17-40	1.0-5.0	7.4-7.8	0-2	0	0
		40-47	5.0-15	6.1-7.8	0-2	0	0
		47-60	1.0-5.0	7.4-8.4	0-2	0	0
Hangaard-----	1	0-10	10-25	6.6-7.8	0	0	0
		10-15	5.0-20	6.6-7.8	0-5	0	0
		15-80	1.0-5.0	7.4-8.4	5-15	0	0
<b>I43A:</b>							
Mavie-----	70	0-12	10-30	7.4-8.4	5-15	0	0
		12-18	5.0-20	7.9-8.4	15-40	0-1	0.0-2.0
		18-39	1.0-5.0	7.4-8.4	10-25	0-1	0.0-2.0
		39-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Vallers-----	10	0-12	20-40	7.4-8.4	10-20	0	0
		12-21	10-25	7.4-8.4	15-35	0-1	0.0-2.0
		21-60	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Strandquist-----	7	0-10	15-30	6.6-8.4	0-10	0	0
		10-20	1.0-5.0	7.4-8.4	5-15	0	0
		20-60	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Strathcona-----	5	0-10	10-30	7.4-8.4	5-15	0	0
		10-17	5.0-15	7.4-8.4	15-30	0-1	0.0-2.0
		17-28	2.0-8.0	7.4-8.4	5-15	0-1	0.0-2.0
		28-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Strathcona, depressional-----	3	0-10	10-45	7.4-8.4	5-15	0	0
		10-17	5.0-15	7.4-8.4	15-30	0-1	0.0-2.0
		17-28	2.0-8.0	7.4-8.4	5-15	0-1	0.0-2.0
		28-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0

Table 24.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity
		In	meq/100 g	pH	Pct	Pct	mmhos/cm
<b>I43A:</b>							
Foxhome-----	2	0-10	10-25	6.6-7.8	0	0	0
		10-15	1.0-8.0	6.6-7.8	0-10	0	0
		15-23	1.0-5.0	7.4-8.4	5-15	0	0
		23-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Karlsruhe-----	2	0-15	10-25	6.6-8.4	5-20	0	0
		15-30	3.0-15	7.4-8.4	15-35	0-1	0
		30-60	1.0-5.0	7.4-8.4	10-25	0	0
Grimstad-----	1	0-9	10-25	7.4-8.4	5-15	0	0
		9-22	5.0-15	7.4-8.4	15-30	0-1	0.0-2.0
		22-28	1.0-5.0	7.4-8.4	5-20	0-1	0.0-2.0
		28-60	10-20	7.4-8.4	10-20	0-1	0.0-2.0
<b>I44A:</b>							
Newfolden-----	75	0-7	10-35	6.6-7.3	0	0	0
		7-16	20-45	6.6-7.3	0	0	0
		16-36	10-25	7.4-8.4	10-25	0-1	0.0-2.0
		36-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Smiley-----	12	0-12	10-25	6.6-7.8	0-5	0	0
		12-19	10-30	6.6-8.4	0-10	0	0
		19-42	10-25	7.4-8.4	15-30	0-1	0.0-2.0
		42-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Boash-----	8	0-9	30-40	6.6-7.8	0-10	0	0
		9-29	20-50	6.6-8.4	3-25	0	0
		29-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Linveltdt-----	4	0-9	10-25	6.6-7.8	0	0	0
		9-16	8.0-20	6.6-7.8	0	0	0
		16-29	1.0-5.0	7.4-8.4	0-15	0	0
		29-45	10-25	7.4-8.4	15-25	0-1	0.0-2.0
		45-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Hapludolls-----	1	0-9	10-35	6.6-7.8	0-10	0	0
		9-60	10-30	7.4-8.4	0-10	0	0
<b>I45A:</b>							
Northwood-----	75	0-9	120-180	5.1-7.8	0	0	0
		9-14	5.0-20	5.6-7.8	0-5	0	0
		14-24	1.0-5.0	5.6-8.4	0-15	0	0
		24-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Hamre-----	10	0-13	120-180	5.1-7.8	0-5	0	0
		13-18	15-35	5.1-7.8	0-10	0	0
		18-71	10-20	6.6-8.4	5-20	0	0
		71-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Berner-----	5	0-28	120-180	5.6-7.3	0	0	0
		28-31	5.0-20	6.1-7.3	0	0	0
		31-44	1.0-5.0	6.1-7.8	0-5	0	0
		44-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Kratka-----	5	0-11	10-30	5.6-7.8	0	0	0
		11-18	1.0-12	5.6-7.8	0-5	0	0
		18-25	2.0-10	6.6-7.8	0-15	0	0
		25-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0

Table 24.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity
		In	meq/100 g	pH	Pct	Pct	mmhos/cm
<b>I45A:</b>							
Strandquist-----	3	0-10	15-30	6.6-8.4	0-10	0	0
		10-20	1.0-5.0	7.4-8.4	5-15	0	0
		20-60	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Roliss-----	2	0-14	20-40	6.6-8.4	0-10	0	0
		14-20	10-25	7.4-8.4	5-15	0-1	0.0-2.0
		20-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
<b>I46A:</b>							
Pits-----	85	---	---	---	---	---	---
Udipsamments-----	10	0-14	3.0-10	6.6-7.3	0	0	0
		14-60	1.0-3.0	6.6-7.8	0-5	0	0
		60-80	1.0-3.0	7.4-8.4	0-5	0	0
Radium-----	2	0-14	3.0-12	6.1-7.8	0-5	0	0
		14-33	2.0-8.0	6.6-8.4	2-10	0	0
		33-43	1.0-5.0	7.4-8.4	5-15	0	0
		43-80	1.0-5.0	7.4-8.4	5-15	0	0
Maddock-----	1	0-10	3.0-15	6.6-7.8	0-3	0	0
		10-14	1.0-8.0	6.6-8.4	0-5	0	0
		14-60	1.0-5.0	6.6-8.4	0-5	0	0
Marquette-----	1	0-6	2.0-12	5.6-7.3	0	0	0
		6-9	2.0-10	5.6-7.3	0	0	0
		9-14	3.0-12	6.6-8.4	0	0	0
		14-60	1.0-4.0	7.4-8.4	5-20	0	0
Sandberg-----	1	0-12	3.0-15	5.6-7.8	0-5	0	0
		12-19	1.0-5.0	6.1-7.8	0-5	0	0
		19-29	1.0-5.0	7.4-8.4	10-25	0	0
		29-80	1.0-5.0	7.4-8.4	5-10	0	0
<b>I47A:</b>							
Poppleton-----	75	0-6	3.0-12	5.6-7.3	0	0	0
		6-9	1.0-6.0	6.1-7.8	0-5	0	0
		9-40	1.0-6.0	6.1-7.8	0-10	0	0
		40-60	1.0-6.0	6.1-7.8	0-15	0	0
Flaming-----	12	0-12	5.0-15	5.6-7.3	0	0	0
		12-17	3.0-15	5.6-8.4	0-3	0	0
		17-27	1.0-8.0	5.6-8.4	0-5	0	0
		27-60	1.0-5.0	5.6-8.4	0-10	0	0
Garborg-----	5	0-12	5.0-20	6.1-7.8	0	0	0
		12-41	3.0-10	6.6-8.4	0-1	0	0
		41-59	1.0-5.0	7.4-8.4	5-15	0	0
		59-80	1.0-5.0	7.4-8.4	0-2	0	0
Hamar-----	3	0-12	5.0-25	6.1-7.8	0	0	0
		12-17	3.0-10	6.6-7.8	0-1	0	0
		17-40	1.0-5.0	7.4-7.8	0-2	0	0
		40-47	5.0-15	6.1-7.8	0-2	0	0
		47-60	1.0-5.0	7.4-8.4	0-2	0	0
Radium-----	2	0-14	3.0-12	6.1-7.8	0-5	0	0
		14-33	2.0-8.0	6.6-8.4	2-10	0	0
		33-43	1.0-5.0	7.4-8.4	5-15	0	0
		43-80	1.0-5.0	7.4-8.4	5-15	0	0

Table 24.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity
		In	meq/100 g	pH	Pct	Pct	mmhos/cm
<b>I47A:</b>							
Ulen-----	2	0-9	5.0-15	7.4-8.4	5-25	0	0
		9-42	5.0-15	7.4-8.4	15-40	0-1	0.0-2.0
		42-60	1.0-5.0	7.4-8.4	5-25	0-1	0.0-2.0
Maddock-----	1	0-10	3.0-15	6.6-7.8	0-3	0	0
		10-14	1.0-8.0	6.6-8.4	0-5	0	0
		14-60	1.0-5.0	6.6-8.4	0-5	0	0
<b>I48A:</b>							
Radium-----	75	0-14	3.0-12	6.1-7.8	0-5	0	0
		14-33	2.0-8.0	6.6-8.4	2-10	0	0
		33-43	1.0-5.0	7.4-8.4	5-15	0	0
		43-80	1.0-5.0	7.4-8.4	5-15	0	0
Sandberg-----	7	0-12	3.0-15	5.6-7.8	0-5	0	0
		12-19	1.0-5.0	6.1-7.8	0-5	0	0
		19-29	1.0-5.0	7.4-8.4	10-25	0	0
		29-80	1.0-5.0	7.4-8.4	5-10	0	0
Oylen-----	5	0-10	5.0-15	6.1-7.3	0	0	0
		10-18	5.0-15	6.1-7.3	0	0	0
		18-38	1.0-3.0	6.1-7.3	0	0	0
		38-80	1.0-2.0	6.6-8.4	0-15	0	0
Flaming-----	4	0-12	5.0-15	5.6-7.3	0	0	0
		12-17	3.0-15	5.6-8.4	0-3	0	0
		17-27	1.0-8.0	5.6-8.4	0-5	0	0
		27-60	1.0-5.0	5.6-8.4	0-10	0	0
Garborg-----	3	0-12	5.0-20	6.1-7.8	0	0	0
		12-41	3.0-10	6.6-8.4	0-1	0	0
		41-59	1.0-5.0	7.4-8.4	5-15	0	0
		59-80	1.0-5.0	7.4-8.4	0-2	0	0
Hangaard-----	3	0-10	10-25	6.6-7.8	0	0	0
		10-15	5.0-20	6.6-7.8	0-5	0	0
		15-80	1.0-5.0	7.4-8.4	5-15	0	0
Hamar-----	2	0-12	5.0-25	6.1-7.8	0	0	0
		12-17	3.0-10	6.6-7.8	0-1	0	0
		17-40	1.0-5.0	7.4-7.8	0-2	0	0
		40-47	5.0-15	6.1-7.8	0-2	0	0
		47-60	1.0-5.0	7.4-8.4	0-2	0	0
Poppleton-----	1	0-6	3.0-12	5.6-7.3	0	0	0
		6-9	1.0-6.0	6.1-7.8	0-5	0	0
		9-40	1.0-6.0	6.1-7.8	0-10	0	0
		40-60	1.0-6.0	6.1-7.8	0-15	0	0
<b>I49A:</b>							
Rauville-----	80	0-27	25-60	7.4-8.4	5-15	0	0
		27-45	15-40	7.4-8.4	10-20	0-1	0.0-2.0
		45-60	3.0-30	7.4-8.4	5-20	0-1	0.0-2.0
Fluvaquents-----	12	0-16	10-35	6.6-7.8	0-10	0	0
		16-80	5.0-30	6.6-7.8	0-15	0-1	0.0-2.0
Water-----	5	---	---	---	---	---	---

Table 24.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity
		In	meq/100 g	pH	Pct	Pct	mmhos/cm
I49A:							
Lamoure-----	3	0-27	25-45	7.4-8.4	0-10	0	0
		27-43	15-40	7.4-8.4	10-20	0-1	0.0-2.0
		43-52	20-40	7.4-8.4	5-20	0	0.0-2.0
		52-60	5.0-30	7.4-8.4	5-20	0-1	0.0-2.0
I50A:							
Reiner-----	70	0-7	5.0-25	6.6-7.3	0	0	0
		7-17	15-30	6.6-7.3	0-10	0	0
		17-35	10-25	7.4-8.4	15-25	0-1	0.0-2.0
		35-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Smiley-----	12	0-12	10-25	6.6-7.8	0-5	0	0
		12-19	10-30	6.6-8.4	0-10	0	0
		19-42	10-25	7.4-8.4	15-30	0-1	0.0-2.0
		42-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Reiner, very cobbly--	7	0-7	5.0-25	6.6-7.3	0	0	0
		7-17	15-30	6.6-7.3	0-10	0	0
		17-35	10-25	7.4-8.4	15-25	0-1	0.0-2.0
		35-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Linveltdt-----	5	0-9	10-25	6.6-7.8	0	0	0
		9-16	8.0-20	6.6-7.8	0	0	0
		16-29	1.0-5.0	7.4-8.4	0-15	0	0
		29-45	10-25	7.4-8.4	15-25	0-1	0.0-2.0
		45-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Eckvoll-----	3	0-9	3.0-15	6.1-7.3	0	0	0
		9-25	1.0-10	6.1-7.3	0	0	0
		25-32	10-30	6.6-7.8	0	0	0
		32-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Kratka-----	3	0-11	10-30	5.6-7.8	0	0	0
		11-18	1.0-12	5.6-7.8	0-5	0	0
		18-25	2.0-10	6.6-7.8	0-15	0	0
		25-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
I51A:							
Reiner-----	65	0-7	3.0-15	6.6-7.3	0	0	0
		7-17	15-30	6.6-7.3	0-10	0	0
		17-35	10-25	7.4-8.4	15-25	0-1	0.0-2.0
		35-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Smiley-----	9	0-12	10-25	6.6-7.8	0-5	0	0
		12-19	10-30	6.6-8.4	0-10	0	0
		19-42	10-25	7.4-8.4	15-30	0-1	0.0-2.0
		42-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Reiner fine sandy loam-----	8	0-7	5.0-25	6.6-7.3	0	0	0
		7-17	15-30	6.6-7.3	0-10	0	0
		17-35	10-25	7.4-8.4	15-25	0-1	0.0-2.0
		35-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Linveltdt-----	7	0-9	10-25	6.6-7.8	0	0	0
		9-16	8.0-20	6.6-7.8	0	0	0
		16-29	1.0-5.0	7.4-8.4	0-15	0	0
		29-45	10-25	7.4-8.4	15-25	0-1	0.0-2.0
		45-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0

Table 24.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity
		In	meq/100 g	pH	Pct	Pct	mmhos/cm
<b>I51A:</b>							
Kratka-----	5	0-11	10-30	5.6-7.8	0	0	0
		11-18	1.0-12	5.6-7.8	0-5	0	0
		18-25	2.0-10	6.6-7.8	0-15	0	0
		25-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Eckvoll-----	3	0-9	3.0-15	6.1-7.3	0	0	0
		9-25	1.0-10	6.1-7.3	0	0	0
		25-32	10-30	6.6-7.8	0	0	0
		32-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Reiner, very cobbly--	3	0-7	5.0-25	6.6-7.3	0	0	0
		7-17	15-30	6.6-7.3	0-10	0	0
		17-35	10-25	7.4-8.4	15-25	0-1	0.0-2.0
		35-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
<b>I52A:</b>							
Reis-----	55	0-9	30-65	7.4-8.4	5-20	0	0
		9-17	25-65	7.4-8.4	15-25	0	0
		17-33	25-50	7.4-8.4	15-30	0-1	0.0-2.0
		33-42	25-60	7.4-8.4	15-30	0-1	0.0-2.0
		42-60	20-50	7.4-8.4	10-30	0-1	0.0-2.0
		60-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Clearwater-----	30	0-8	30-65	6.6-7.8	0-5	0	0
		8-35	20-50	7.4-8.4	3-25	0	0
		35-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Clearwater, very cobbly-----	5	0-8	30-65	6.6-7.8	0-5	0	0
		8-35	20-50	7.4-8.4	3-25	0	0
		35-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Clearwater, depressional-----	3	0-8	20-60	6.6-7.8	0-5	0	0
		8-35	20-55	7.4-8.4	3-25	0	0
		35-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Espelie-----	3	0-9	10-30	6.6-7.3	0	0	0
		9-24	2.0-8.0	6.6-7.8	0-10	0	0
		24-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Hattie-----	3	0-8	30-55	7.4-8.4	0-5	0	0
		8-22	20-55	7.4-8.4	5-25	0-1	0.0-2.0
		22-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Wyandotte-----	1	0-8	30-40	7.4-7.8	5-20	0	0
		8-15	10-20	7.9-8.4	15-25	0-1	0.0-2.0
		15-34	1.0-5.0	7.4-8.4	5-20	0-1	0.0-2.0
		34-60	20-50	7.4-8.4	10-30	0-1	0.0-2.0
<b>I53A:</b>							
Roliss-----	75	0-14	20-40	6.6-8.4	0-10	0	0
		14-20	10-25	7.4-8.4	5-15	0-1	0.0-2.0
		20-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Kratka-----	8	0-11	10-30	5.6-7.8	0	0	0
		11-18	1.0-12	5.6-7.8	0-5	0	0
		18-25	2.0-10	6.6-7.8	0-15	0	0
		25-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0

Table 24.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth		Cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity
		In	meq/100 g	pH	Pct	Pct	mmhos/cm	
I53A:								
Roliss, very cobbly--	7	0-14	20-40	6.6-8.4	0-10	0	0	
		14-20	10-25	7.4-8.4	5-15	0-1	0.0-2.0	
		20-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0	
Kittson-----	5	0-10	10-35	6.6-7.8	0	0	0	
		10-17	10-25	6.6-7.8	0-5	0	0	
		17-36	10-25	7.4-8.4	15-25	0-1	0.0-2.0	
		36-60	10-20	7.4-8.4	10-20	0-1	0.0-2.0	
Roliss, depressional	3	0-14	15-50	6.6-8.4	0-10	0	0	
		14-20	10-25	7.4-8.4	5-15	0-1	0.0-2.0	
		20-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0	
Smiley-----	2	0-12	10-25	6.6-7.8	0-5	0	0	
		12-19	10-30	6.6-8.4	0-10	0	0	
		19-42	10-25	7.4-8.4	15-30	0-1	0.0-2.0	
		42-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0	
I54A:								
Roliss, depressional	80	0-14	15-50	6.6-8.4	0-10	0	0	
		14-20	10-25	7.4-8.4	5-15	0-1	0.0-2.0	
		20-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0	
Roliss-----	12	0-14	20-40	6.6-8.4	0-10	0	0	
		14-20	10-25	7.4-8.4	5-15	0-1	0.0-2.0	
		20-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0	
Hamre-----	5	0-13	120-180	5.1-7.8	0-5	0	0	
		13-18	15-35	5.1-7.8	0-10	0	0	
		18-71	10-20	6.6-8.4	5-20	0	0	
		71-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0	
Kratka-----	3	0-11	10-30	5.6-7.8	0	0	0	
		11-18	1.0-12	5.6-7.8	0-5	0	0	
		18-25	2.0-10	6.6-7.8	0-15	0	0	
		25-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0	
I55A:								
Rosewood-----	75	0-8	10-25	7.4-8.4	5-25	0	0	
		8-18	2.0-10	7.4-8.4	15-40	0-1	0.0-2.0	
		18-80	1.0-5.0	7.4-8.4	5-25	0-1	0.0-2.0	
Ulen-----	10	0-9	10-25	7.4-8.4	5-25	0	0	
		9-42	5.0-15	7.4-8.4	15-40	0-1	0.0-2.0	
		42-60	1.0-5.0	7.4-8.4	5-25	0-1	0.0-2.0	
Hamar-----	6	0-12	5.0-25	6.1-7.8	0	0	0	
		12-17	3.0-10	6.6-7.8	0-1	0	0	
		17-40	1.0-5.0	7.4-7.8	0-2	0	0	
		40-47	5.0-15	6.1-7.8	0-2	0	0	
		47-60	1.0-5.0	7.4-8.4	0-2	0	0	
Rosewood, depressional-----	3	0-8	10-40	7.4-8.4	5-25	0	0	
		8-18	2.0-10	7.4-8.4	15-40	0-1	0.0-2.0	
		18-80	1.0-5.0	7.4-8.4	5-25	0-1	0.0-2.0	

Table 24.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity
		In	meq/100 g	pH	Pct	Pct	mmhos/cm
<b>I55A:</b>							
Syrene-----	3	0-9	10-25	7.4-8.4	5-20	0	0
		9-17	5.0-25	7.9-8.4	15-35	0-1	0.0-2.0
		17-27	1.0-5.0	7.4-8.4	10-30	0-1	0.0-2.0
		27-60	1.0-5.0	7.4-8.4	5-15	0	0.0-2.0
Karlsruhe-----	1	0-15	10-25	6.6-8.4	5-20	0	0
		15-30	3.0-15	7.4-8.4	15-35	0-1	0
		30-60	1.0-5.0	7.4-8.4	10-25	0	0
Strathcona-----	1	0-10	10-30	7.4-8.4	5-15	0	0
		10-17	5.0-15	7.4-8.4	15-30	0-1	0.0-2.0
		17-28	2.0-8.0	7.4-8.4	5-15	0-1	0.0-2.0
		28-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Thiefriever-----	1	0-12	10-30	7.4-8.4	5-25	0	0
		12-23	5.0-15	7.4-8.4	15-40	0-1	0.0-2.0
		23-32	1.0-5.0	7.4-8.4	5-20	0-1	0.0-2.0
		32-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
<b>I56A:</b>							
Rosewood-----	50	0-8	10-25	7.4-8.4	5-25	0	0
		8-18	2.0-10	7.4-8.4	15-40	0-1	0.0-2.0
		18-80	1.0-5.0	7.4-8.4	5-25	0-1	0.0-2.0
Venlo-----	40	0-13	15-40	6.1-7.3	0	0	0
		13-60	1.0-5.0	6.6-8.4	0-10	0	0.0-2.0
Deerwood-----	3	0-10	100-180	5.6-7.8	0-5	0	0
		10-12	5.0-20	6.1-8.4	0-15	0	0
		12-60	1.0-5.0	7.4-8.4	10-20	0	0
Syrene-----	3	0-9	10-25	7.4-8.4	5-20	0	0
		9-17	5.0-25	7.9-8.4	15-35	0-1	0.0-2.0
		17-27	1.0-5.0	7.4-8.4	10-30	0-1	0.0-2.0
		27-60	1.0-5.0	7.4-8.4	5-15	0	0.0-2.0
Ulen-----	2	0-9	5.0-15	7.4-8.4	5-25	0	0
		9-42	5.0-15	7.4-8.4	15-40	0-1	0.0-2.0
		42-60	1.0-5.0	7.4-8.4	5-25	0-1	0.0-2.0
Strathcona-----	1	0-10	10-30	7.4-8.4	5-15	0	0
		10-17	5.0-15	7.4-8.4	15-30	0-1	0.0-2.0
		17-28	2.0-8.0	7.4-8.4	5-15	0-1	0.0-2.0
		28-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Thiefriever-----	1	0-12	10-30	7.4-8.4	5-25	0	0
		12-23	5.0-15	7.4-8.4	15-40	0-1	0.0-2.0
		23-32	1.0-5.0	7.4-8.4	5-20	0-1	0.0-2.0
		32-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
<b>I57B:</b>							
Sandberg-----	50	0-12	3.0-15	5.6-7.8	0-5	0	0
		12-19	1.0-5.0	6.1-7.8	0-5	0	0
		19-29	1.0-5.0	7.4-8.4	10-25	0	0
		29-80	1.0-5.0	7.4-8.4	5-10	0	0
Radium-----	25	0-14	3.0-12	6.1-7.8	0-5	0	0
		14-33	2.0-8.0	6.6-8.4	2-10	0	0
		33-43	1.0-5.0	7.4-8.4	5-15	0	0
		43-80	1.0-5.0	7.4-8.4	5-15	0	0

Table 24.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity
		In	meq/100 g	pH	Pct	Pct	mmhos/cm
<b>I57B:</b>							
Sioux-----	8	0-5	10-25	6.6-8.4	0-5	0	0
		5-8	5.0-15	6.6-8.4	0-5	0	0
		8-60	1.0-5.0	7.4-8.4	0-15	0	0
Oylen-----	7	0-10	5.0-15	6.1-7.3	0	0	0
		10-18	5.0-15	6.1-7.3	0	0	0
		18-38	1.0-3.0	6.1-7.3	0	0	0
		38-80	1.0-2.0	6.6-8.4	0-15	0	0
Flaming-----	5	0-12	5.0-15	5.6-7.3	0	0	0
		12-17	3.0-15	5.6-8.4	0-3	0	0
		17-27	1.0-8.0	5.6-8.4	0-5	0	0
		27-60	1.0-5.0	5.6-8.4	0-10	0	0
Garborg-----	5	0-12	5.0-20	6.1-7.8	0	0	0
		12-41	3.0-10	6.6-8.4	0-1	0	0
		41-59	1.0-5.0	7.4-8.4	5-15	0	0
		59-80	1.0-5.0	7.4-8.4	0-2	0	0
<b>I58A:</b>							
Seelyeville-----	90	0-10	120-200	4.5-7.3	0	0	0
		10-80	140-200	4.5-7.3	0	0	0
Cathro-----	3	0-11	120-180	4.5-7.8	0	0	0
		11-23	120-180	4.5-7.8	0	0	0
		23-60	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Dora-----	3	0-12	120-180	4.5-7.8	0	0	0
		12-32	120-180	4.5-7.8	0	0	0
		32-36	20-60	6.1-8.4	0-10	0	0
		36-60	20-55	6.1-8.4	0-20	0-1	0.0-2.0
Markey-----	3	0-32	120-180	4.5-7.8	0	0	0
		32-60	1.0-5.0	5.6-8.4	0-5	0	0
Berner-----	1	0-28	120-180	5.6-7.3	0	0	0
		28-31	5.0-20	6.1-7.3	0	0	0
		31-44	1.0-5.0	6.1-7.8	0-5	0	0
		44-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
<b>I59A:</b>							
Smiley-----	65	0-12	10-25	6.6-7.8	0-5	0	0
		12-19	10-30	6.6-8.4	0-10	0	0
		19-42	10-25	7.4-8.4	15-30	0-1	0.0-2.0
		42-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Smiley, very cobbly--	10	0-12	10-25	6.6-7.8	0-5	0	0
		12-19	10-30	6.6-8.4	0-10	0	0
		19-42	10-25	7.4-8.4	15-30	0-1	0.0-2.0
		42-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Kratka-----	9	0-11	10-30	5.6-7.8	0	0	0
		11-18	1.0-12	5.6-7.8	0-5	0	0
		18-25	2.0-10	6.6-7.8	0-15	0	0
		25-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Roliss-----	5	0-14	20-40	6.6-8.4	0-10	0	0
		14-20	10-25	7.4-8.4	5-15	0-1	0.0-2.0
		20-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0

Table 24.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity
		In	meq/100 g	pH	Pct	Pct	mmhos/cm
<b>I59A:</b>							
Reiner-----	4	0-7	5.0-25	6.6-7.3	0	0	0
		7-17	15-30	6.6-7.3	0-10	0	0
		17-35	10-25	7.4-8.4	15-25	0-1	0.0-2.0
		35-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Linveldt-----	3	0-9	10-25	6.6-7.8	0	0	0
		9-16	8.0-20	6.6-7.8	0	0	0
		16-29	1.0-5.0	7.4-8.4	0-15	0	0
		29-45	10-25	7.4-8.4	15-25	0-1	0.0-2.0
		45-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Smiley, depressional	3	0-12	15-50	6.6-7.8	0-5	0	0
		12-19	10-30	6.6-8.4	0-10	0	0
		19-42	10-25	7.4-8.4	15-30	0-1	0.0-2.0
		42-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Strandquist-----	1	0-10	15-30	6.6-8.4	0-10	0	0
		10-20	1.0-5.0	7.4-8.4	5-15	0	0
		20-60	10-20	7.4-8.4	10-20	0-1	0.0-2.0
<b>I60A:</b>							
Smiley, depressional	80	0-12	15-50	6.6-7.8	0-5	0	0
		12-19	10-30	6.6-8.4	0-10	0	0
		19-42	10-25	7.4-8.4	15-30	0-1	0.0-2.0
		42-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Smiley-----	10	0-12	10-25	6.6-7.8	0-5	0	0
		12-19	10-30	6.6-8.4	0-10	0	0
		19-42	10-25	7.4-8.4	15-30	0-1	0.0-2.0
		42-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Hamre-----	5	0-13	120-180	5.1-7.8	0-5	0	0
		13-18	15-35	5.1-7.8	0-10	0	0
		18-71	10-20	6.6-8.4	5-20	0	0
		71-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Kratka-----	5	0-11	10-30	5.6-7.8	0	0	0
		11-18	1.0-12	5.6-7.8	0-5	0	0
		18-25	2.0-10	6.6-7.8	0-15	0	0
		25-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
<b>I61A:</b>							
Strandquist-----	70	0-10	15-30	6.6-8.4	0-10	0	0
		10-20	1.0-5.0	7.4-8.4	5-15	0	0
		20-60	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Mavie-----	8	0-12	10-30	7.4-8.4	5-15	0	0
		12-18	5.0-20	7.9-8.4	15-40	0-1	0.0-2.0
		18-39	1.0-5.0	7.4-8.4	10-25	0-1	0.0-2.0
		39-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Roliss-----	7	0-14	20-40	6.6-8.4	0-10	0	0
		14-20	10-25	7.4-8.4	5-15	0-1	0.0-2.0
		20-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Kratka-----	5	0-11	10-30	5.6-7.8	0	0	0
		11-18	1.0-12	5.6-7.8	0-5	0	0
		18-25	2.0-10	6.6-7.8	0-15	0	0
		25-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0

Table 24.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity
		In	meq/100 g	pH	Pct	Pct	mmhos/cm
<b>I61A:</b>							
Foxhome-----	4	0-10	10-25	6.6-7.8	0	0	0
		10-15	1.0-8.0	6.6-7.8	0-10	0	0
		15-23	1.0-5.0	7.4-8.4	5-15	0	0
		23-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Hangaard-----	3	0-10	10-25	6.6-7.8	0	0	0
		10-15	5.0-20	6.6-7.8	0-5	0	0
		15-80	1.0-5.0	7.4-8.4	5-15	0	0
Northwood-----	3	0-9	120-180	5.1-7.8	0	0	0
		9-14	5.0-20	5.6-7.8	0-5	0	0
		14-24	1.0-5.0	5.6-8.4	0-15	0	0
		24-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
<b>I62A:</b>							
Syrene-----	70	0-9	10-25	7.4-8.4	5-20	0	0
		9-17	5.0-25	7.9-8.4	15-35	0-1	0.0-2.0
		17-27	1.0-5.0	7.4-8.4	10-30	0-1	0.0-2.0
		27-60	1.0-5.0	7.4-8.4	5-15	0	0.0-2.0
Rosewood-----	11	0-8	10-25	7.4-8.4	5-25	0	0
		8-18	2.0-10	7.4-8.4	15-40	0-1	0.0-2.0
		18-80	1.0-5.0	7.4-8.4	5-25	0-1	0.0-2.0
Hangaard-----	5	0-10	10-25	6.6-7.8	0	0	0
		10-15	5.0-20	6.6-7.8	0-5	0	0
		15-80	1.0-5.0	7.4-8.4	5-15	0	0
Karlsruhe-----	4	0-15	10-25	6.6-8.4	5-20	0	0
		15-30	3.0-15	7.4-8.4	15-35	0-1	0
		30-60	1.0-5.0	7.4-8.4	10-25	0	0
Deerwood-----	3	0-10	100-180	5.6-7.8	0-5	0	0
		10-12	5.0-20	6.1-8.4	0-15	0	0
		12-60	1.0-5.0	7.4-8.4	10-20	0	0
Hamar-----	3	0-12	5.0-25	6.1-7.8	0	0	0
		12-17	3.0-10	6.6-7.8	0-1	0	0
		17-40	1.0-5.0	7.4-7.8	0-2	0	0
		40-47	5.0-15	6.1-7.8	0-2	0	0
		47-60	1.0-5.0	7.4-8.4	0-2	0	0
Strandquist-----	2	0-10	15-30	6.6-8.4	0-10	0	0
		10-20	1.0-5.0	7.4-8.4	5-15	0	0
		20-60	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Radium-----	1	0-14	3.0-12	6.1-7.8	0-5	0	0
		14-33	2.0-8.0	6.6-8.4	2-10	0	0
		33-43	1.0-5.0	7.4-8.4	5-15	0	0
		43-80	1.0-5.0	7.4-8.4	5-15	0	0
Wyandotte-----	1	0-8	30-40	7.4-7.8	5-20	0	0
		8-15	10-20	7.9-8.4	15-25	0-1	0.0-2.0
		15-34	1.0-5.0	7.4-8.4	5-20	0-1	0.0-2.0
		34-60	20-50	7.4-8.4	10-30	0-1	0.0-2.0

Table 24.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity
		In	meq/100 g	pH	Pct	Pct	mmhos/cm
<b>I63A:</b>							
Thiefriver-----	70	0-12	10-30	7.4-8.4	5-25	0	0
		12-23	5.0-15	7.4-8.4	15-40	0-1	0.0-2.0
		23-32	1.0-5.0	7.4-8.4	5-20	0-1	0.0-2.0
		32-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Espelie-----	10	0-9	10-30	6.6-7.3	0	0	0
		9-24	2.0-8.0	6.6-7.8	0-10	0	0
		24-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Foxlake-----	7	0-19	20-40	6.6-7.8	0-5	0	0
		19-38	20-55	7.4-8.4	0-5	0	0
		38-49	20-50	7.4-8.4	10-30	0-1	0.0-2.0
		49-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Huot-----	5	0-14	5.0-25	7.4-8.4	5-25	0	0
		14-26	5.0-15	7.4-8.4	15-40	0-1	0.0-2.0
		26-34	1.0-5.0	7.4-8.4	5-20	0-1	0.0-2.0
		34-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Clearwater, depressional-----	3	0-8	20-60	6.6-7.8	0-5	0	0
		8-35	20-55	7.4-8.4	3-25	0	0
		35-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Rosewood-----	3	0-8	10-25	7.4-8.4	5-25	0	0
		8-18	2.0-10	7.4-8.4	15-40	0-1	0.0-2.0
		18-80	1.0-5.0	7.4-8.4	5-25	0-1	0.0-2.0
Ulen-----	1	0-9	10-25	7.4-8.4	5-25	0	0
		9-42	5.0-15	7.4-8.4	15-40	0-1	0.0-2.0
		42-60	1.0-5.0	7.4-8.4	5-25	0-1	0.0-2.0
Wyandotte-----	1	0-8	30-40	7.4-7.8	5-20	0	0
		8-15	10-20	7.9-8.4	15-25	0-1	0.0-2.0
		15-34	1.0-5.0	7.4-8.4	5-20	0-1	0.0-2.0
		34-60	20-50	7.4-8.4	10-30	0-1	0.0-2.0
<b>I64A:</b>							
Ulen-----	70	0-9	10-25	7.4-8.4	5-25	0	0
		9-42	5.0-15	7.4-8.4	15-40	0-1	0.0-2.0
		42-60	1.0-5.0	7.4-8.4	5-25	0-1	0.0-2.0
Rosewood-----	10	0-8	10-25	7.4-8.4	5-25	0	0
		8-18	2.0-10	7.4-8.4	15-40	0-1	0.0-2.0
		18-80	1.0-5.0	7.4-8.4	5-25	0-1	0.0-2.0
Flaming-----	8	0-12	5.0-15	5.6-7.3	0	0	0
		12-17	3.0-15	5.6-8.4	0-3	0	0
		17-27	1.0-8.0	5.6-8.4	0-5	0	0
		27-60	1.0-5.0	5.6-8.4	0-10	0	0
Karlsruhe-----	5	0-15	10-25	6.6-8.4	5-20	0	0
		15-30	3.0-15	7.4-8.4	15-35	0-1	0
		30-60	1.0-5.0	7.4-8.4	10-25	0	0
Radium-----	3	0-14	3.0-12	6.1-7.8	0-5	0	0
		14-33	2.0-8.0	6.6-8.4	2-10	0	0
		33-43	1.0-5.0	7.4-8.4	5-15	0	0
		43-80	1.0-5.0	7.4-8.4	5-15	0	0

Table 24.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity
		In	meq/100 g	pH	Pct	Pct	mmhos/cm
<b>I64A:</b>							
Strathcona-----	2	0-10	10-30	7.4-8.4	5-15	0	0
		10-17	5.0-15	7.4-8.4	15-30	0-1	0.0-2.0
		17-28	2.0-8.0	7.4-8.4	5-15	0-1	0.0-2.0
		28-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Thiefriever-----	2	0-12	10-30	7.4-8.4	5-25	0	0
		12-23	5.0-15	7.4-8.4	15-40	0-1	0.0-2.0
		23-32	1.0-5.0	7.4-8.4	5-20	0-1	0.0-2.0
		32-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
<b>I65A:</b>							
Ulen-----	70	0-9	5.0-15	7.4-8.4	5-25	0	0
		9-42	5.0-15	7.4-8.4	15-40	0-1	0.0-2.0
		42-60	1.0-5.0	7.4-8.4	5-25	0-1	0.0-2.0
Rosewood-----	10	0-8	10-25	7.4-8.4	5-25	0	0
		8-18	2.0-10	7.4-8.4	15-40	0-1	0.0-2.0
		18-80	1.0-5.0	7.4-8.4	5-25	0-1	0.0-2.0
Flaming-----	6	0-12	5.0-15	5.6-7.3	0	0	0
		12-17	3.0-15	5.6-8.4	0-3	0	0
		17-27	1.0-8.0	5.6-8.4	0-5	0	0
		27-60	1.0-5.0	5.6-8.4	0-10	0	0
Poppleton-----	4	0-6	3.0-12	5.6-7.3	0	0	0
		6-9	1.0-6.0	6.1-7.8	0-5	0	0
		9-40	1.0-6.0	6.1-7.8	0-10	0	0
		40-60	1.0-6.0	6.1-7.8	0-15	0	0
Karlsruhe-----	3	0-15	10-25	6.6-8.4	5-20	0	0
		15-30	3.0-15	7.4-8.4	15-35	0-1	0
		30-60	1.0-5.0	7.4-8.4	10-25	0	0
Radium-----	3	0-14	3.0-12	6.1-7.8	0-5	0	0
		14-33	2.0-8.0	6.6-8.4	2-10	0	0
		33-43	1.0-5.0	7.4-8.4	5-15	0	0
		43-80	1.0-5.0	7.4-8.4	5-15	0	0
Strathcona-----	2	0-10	10-30	7.4-8.4	5-15	0	0
		10-17	5.0-15	7.4-8.4	15-30	0-1	0.0-2.0
		17-28	2.0-8.0	7.4-8.4	5-15	0-1	0.0-2.0
		28-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Thiefriever-----	2	0-12	10-30	7.4-8.4	5-25	0	0
		12-23	5.0-15	7.4-8.4	15-40	0-1	0.0-2.0
		23-32	1.0-5.0	7.4-8.4	5-20	0-1	0.0-2.0
		32-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
<b>I66A:</b>							
Vallers-----	75	0-12	20-40	7.4-8.4	10-20	0	0
		12-21	10-25	7.4-8.4	15-35	0-1	0.0-2.0
		21-60	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Vallers, very cobbly	7	0-12	20-40	7.4-8.4	10-20	0	0
		12-21	10-25	7.4-8.4	15-35	0-1	0.0-2.0
		21-60	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Hamerly-----	6	0-8	15-35	6.6-8.4	0-25	0	0
		8-25	10-25	7.4-8.4	15-35	0-1	0.0-2.0
		25-60	10-20	7.4-8.4	10-20	0-1	0.0-2.0

Table 24.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity
		In	meq/100 g	pH	Pct	Pct	mmhos/cm
<b>I66A:</b>							
Grimstad-----	3	0-9	10-25	7.4-8.4	5-15	0	0
		9-22	5.0-15	7.4-8.4	15-30	0-1	0.0-2.0
		22-28	1.0-5.0	7.4-8.4	5-20	0-1	0.0-2.0
		28-60	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Mavie-----	3	0-12	10-30	7.4-8.4	5-15	0	0
		12-18	5.0-20	7.9-8.4	15-40	0-1	0.0-2.0
		18-39	1.0-5.0	7.4-8.4	10-25	0-1	0.0-2.0
		39-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Roliss, depressional	3	0-14	15-50	6.6-8.4	0-10	0	0
		14-20	10-25	7.4-8.4	5-15	0-1	0.0-2.0
		20-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Strathcona-----	3	0-10	10-30	7.4-8.4	5-15	0	0
		10-17	5.0-15	7.4-8.4	15-30	0-1	0.0-2.0
		17-28	2.0-8.0	7.4-8.4	5-15	0-1	0.0-2.0
		28-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
<b>I67A:</b>							
Wheatville-----	70	0-9	10-30	7.4-8.4	5-25	0	0
		9-31	5.0-20	7.4-8.4	15-40	0-1	0.0-2.0
		31-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Augsburg-----	13	0-11	10-30	7.4-8.4	5-25	0	0
		11-18	5.0-20	7.4-8.4	15-40	0-1	0.0-2.0
		18-33	3.0-15	7.4-8.4	10-30	0-1	0.0-2.0
		33-60	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Glyndon-----	8	0-11	10-25	7.4-8.4	5-25	0	0
		11-28	5.0-15	7.4-8.4	15-40	0-1	0.0-2.0
		28-60	3.0-15	7.4-8.4	10-30	0-1	0.0-2.0
Foxlake-----	5	0-19	20-40	6.6-7.8	0-5	0	0
		19-38	20-55	7.4-8.4	0-5	0	0
		38-49	20-50	7.4-8.4	10-30	0-1	0.0-2.0
		49-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Hilaire-----	2	0-10	5.0-15	6.6-7.3	0-5	0	0
		10-34	2.0-8.0	6.6-7.8	0-10	0	0
		34-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Ulen-----	2	0-9	5.0-15	7.4-8.4	5-25	0	0
		9-42	5.0-15	7.4-8.4	15-40	0-1	0.0-2.0
		42-60	1.0-5.0	7.4-8.4	5-25	0-1	0.0-2.0
<b>I68A:</b>							
Wheatville-----	70	0-9	10-25	7.4-8.4	5-25	0	0
		9-31	5.0-20	7.4-8.4	15-40	0-1	0.0-2.0
		31-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Augsburg-----	13	0-11	10-30	7.4-8.4	5-25	0	0
		11-18	5.0-20	7.4-8.4	15-40	0-1	0.0-2.0
		18-33	3.0-15	7.4-8.4	10-30	0-1	0.0-2.0
		33-60	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Glyndon-----	8	0-11	10-25	7.4-8.4	5-25	0	0
		11-28	5.0-15	7.4-8.4	15-40	0-1	0.0-2.0
		28-60	3.0-15	7.4-8.4	10-30	0-1	0.0-2.0

Table 24.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity
		In	meq/100 g	pH	Pct	Pct	mmhos/cm
<b>I68A:</b>							
Foxlake-----	5	0-19	20-40	6.6-7.8	0-5	0	0
		19-38	20-55	7.4-8.4	0-5	0	0
		38-49	20-50	7.4-8.4	10-30	0-1	0.0-2.0
		49-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Hilaire-----	2	0-10	5.0-15	6.6-7.3	0-5	0	0
		10-34	2.0-8.0	6.6-7.8	0-10	0	0
		34-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Ulen-----	2	0-9	5.0-15	7.4-8.4	5-25	0	0
		9-42	5.0-15	7.4-8.4	15-40	0-1	0.0-2.0
		42-60	1.0-5.0	7.4-8.4	5-25	0-1	0.0-2.0
<b>I69A:</b>							
Wyandotte-----	65	0-8	30-40	7.4-7.8	5-20	0	0
		8-15	10-20	7.9-8.4	15-25	0-1	0.0-2.0
		15-34	1.0-5.0	7.4-8.4	5-20	0-1	0.0-2.0
		34-60	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Foxlake-----	10	0-19	20-40	6.6-7.8	0-5	0	0
		19-38	20-55	7.4-8.4	0-5	0	0
		38-49	20-50	7.4-8.4	10-30	0-1	0.0-2.0
		49-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Espelie-----	8	0-9	10-30	6.6-7.3	0	0	0
		9-24	2.0-8.0	6.6-7.8	0-10	0	0
		24-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Clearwater, depressional-----	5	0-8	20-60	6.6-7.8	0-5	0	0
		8-35	20-55	7.4-8.4	3-25	0	0
		35-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Thiefriever-----	5	0-12	10-30	7.4-8.4	5-25	0	0
		12-23	5.0-15	7.4-8.4	15-40	0-1	0.0-2.0
		23-32	1.0-5.0	7.4-8.4	5-20	0-1	0.0-2.0
		32-80	20-50	7.4-8.4	10-30	0-1	0.0-2.0
Karlsruhe-----	4	0-15	10-25	6.6-8.4	5-20	0	0
		15-30	3.0-15	7.4-8.4	15-35	0-1	0
		30-60	1.0-5.0	7.4-8.4	10-25	0	0
Syrene-----	3	0-9	10-25	7.4-8.4	5-20	0	0
		9-17	5.0-25	7.9-8.4	15-35	0-1	0.0-2.0
		17-27	1.0-5.0	7.4-8.4	10-30	0-1	0.0-2.0
		27-60	1.0-5.0	7.4-8.4	5-15	0	0.0-2.0
<b>I70A:</b>							
Strathcona-----	70	0-10	10-30	7.4-8.4	5-15	0	0
		10-17	5.0-15	7.4-8.4	15-30	0-1	0.0-2.0
		17-28	2.0-8.0	7.4-8.4	5-15	0-1	0.0-2.0
		28-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Kratka-----	10	0-11	10-30	5.6-7.8	0	0	0
		11-18	1.0-12	5.6-7.8	0-5	0	0
		18-25	2.0-10	6.6-7.8	0-15	0	0
		25-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0

Table 24.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Pct. of map unit	Depth	Cation- exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity
		In	meq/100 g	pH	Pct	Pct	mmhos/cm
I70A:							
Roliss-----	6	0-14	20-40	6.6-8.4	0-10	0	0
		14-20	10-25	7.4-8.4	5-15	0-1	0.0-2.0
		20-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Grimstad-----	5	0-9	10-25	7.4-8.4	5-15	0	0
		9-22	5.0-15	7.4-8.4	15-30	0-1	0.0-2.0
		22-28	1.0-5.0	7.4-8.4	5-20	0-1	0.0-2.0
		28-60	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Mavie-----	3	0-12	10-30	7.4-8.4	5-15	0	0
		12-18	5.0-20	7.9-8.4	15-40	0-1	0.0-2.0
		18-39	1.0-5.0	7.4-8.4	10-25	0-1	0.0-2.0
		39-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
Rosewood-----	3	0-8	10-25	7.4-8.4	5-25	0	0
		8-18	2.0-10	7.4-8.4	15-40	0-1	0.0-2.0
		18-80	1.0-5.0	7.4-8.4	5-25	0-1	0.0-2.0
Strathcona, depressional-----	3	0-10	10-45	7.4-8.4	5-15	0	0
		10-17	5.0-15	7.4-8.4	15-30	0-1	0.0-2.0
		17-28	2.0-8.0	7.4-8.4	5-15	0-1	0.0-2.0
		28-80	10-20	7.4-8.4	10-20	0-1	0.0-2.0
M-W. Miscellaneous water							
W. Water							

Table 25.--Soil Moisture, Ponding, and Flooding

(Depths are in feet. For top depth, bottom depth, and ponding depth, L indicates a low value, R indicates a representative value, and H indicates a high value. See text for further explanation of terms used in this table. Some map units are subject to occasional overland flooding of brief or very brief duration in spring or after heavy or prolonged precipitation in summer)

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B109A Bowstring and Fluvaquents soils, MLRA 88, 0 to 2 percent slopes, frequently flooded

Bowstring (45 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	0.5	1.3	3.3	none	---	frequent	very long	0.0-0.3-0.5		
	wet	0.5	1.3	3.3	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	1.3	2.1	4.1	none	---	frequent	very long	0.0-0.3-0.5		
	wet	1.3	2.1	4.1	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	0.0	0.0	2.5	frequent	very long	frequent	very long	0.0-0.5-1.0		
	wet	0.0	0.0	2.5	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	0.0	0.0	0.8	very frequent	very long	frequent	very long	0.0-0.5-1.0		
	wet	0.0	0.0	0.8	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	0.0	0.0	1.3	very frequent	long	frequent	very long	0.0-0.5-1.0		
	wet	0.0	0.0	1.3	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	0.0	0.0	1.6	frequent	long	frequent	very long	0.0-0.5-1.0		
	wet	0.0	0.0	1.6	6.7	6.7	6.7							
July	moist	0.0	0.0	0.0	0.2	0.8	2.5	frequent	brief	occasional	long	0.0-0.3-0.5		
	wet	0.2	0.8	2.5	6.7	6.7	6.7							
August	moist	0.0	0.0	0.0	0.8	1.6	3.3	frequent	brief	occasional	long	0.0-0.3-0.5		
	wet	0.8	1.6	3.3	6.7	6.7	6.7							
September	moist	0.0	0.0	0.0	0.3	1.1	3.0	frequent	brief	occasional	brief	0.0-0.3-0.5		
	wet	0.3	1.1	3.0	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	0.2	0.5	2.5	frequent	long	occasional	brief	0.0-0.3-0.5		
	wet	0.2	0.5	2.5	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	0.0	0.3	1.6	rare	long	occasional	long	0.0-0.3-0.5		
	wet	0.0	0.3	1.6	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	0.5	0.8	2.5	none	---	frequent	very long	0.0-0.3-0.5		
	wet	0.5	0.8	2.5	6.7	6.7	6.7							

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

B109A (continued)

Fluvaquents (40 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	0.5	1.3	2.5	none	---	frequent	very long	0.0	0.5	1.0
	wet	0.5	1.3	2.5	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	0.8	1.6	3.0	none	---	frequent	very long	0.0	0.5	1.0
	wet	0.8	1.6	3.0	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	0.0	0.0	1.6	frequent	very long	frequent	very long	0.0	0.5	1.0
	wet	0.0	0.0	1.6	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	0.0	0.0	0.8	very frequent	very long	frequent	very long	0.0	0.7	1.3
	wet	0.0	0.0	0.8	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	0.0	0.0	1.3	very frequent	long	frequent	very long	0.0	0.7	1.3
	wet	0.0	0.0	1.3	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	0.0	0.5	1.6	frequent	long	frequent	very long	0.0	0.5	1.0
	wet	0.0	0.5	1.6	6.7	6.7	6.7							
July	moist	0.0	0.0	0.0	0.5	1.3	2.5	frequent	brief	occasional	long	0.0	0.5	1.0
	wet	0.5	1.3	2.5	6.7	6.7	6.7							
August	moist	0.0	0.0	0.0	0.8	1.6	3.0	frequent	brief	occasional	brief	0.0	0.5	1.0
	wet	0.8	1.6	3.0	6.7	6.7	6.7							
September	moist	0.0	0.0	0.0	0.5	1.3	2.5	frequent	long	occasional	brief	0.0	0.5	1.0
	wet	0.5	1.3	2.5	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	0.3	0.8	2.0	frequent	long	occasional	long	0.0	0.5	1.0
	wet	0.3	0.8	2.0	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	0.2	0.5	1.6	rare	long	occasional	long	0.0	0.5	1.0
	wet	0.2	0.5	1.6	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	0.3	0.8	2.0	none	---	frequent	very long	0.0	0.5	1.0
	wet	0.3	0.8	2.0	6.7	6.7	6.7							

Hapludalfs (5 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	4.1	5.4	6.7	none	---	none	---	---	---	---
	wet	4.1	5.4	6.7	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	4.9	6.2	6.7	none	---	none	---	---	---	---
	wet	4.9	6.2	6.7	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	4.1	5.4	6.7	rare	brief	none	---	---	---	---
	wet	4.1	5.4	6.7	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	2.1	2.5	3.8	rare	brief	none	---	---	---	---
	wet	2.1	2.5	3.8	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	2.5	2.8	4.6	rare	brief	none	---	---	---	---
	wet	2.5	2.8	4.6	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	2.8	3.1	5.7	rare	very brief	none	---	---	---	---
	wet	2.8	3.1	5.7	6.7	6.7	6.7							
July	moist	0.0	0.0	0.0	3.3	5.7	6.7	very rare	very brief	none	---	---	---	---
	wet	3.3	5.7	6.7	6.7	6.7	6.7							
August	moist	0.0	0.0	0.0	4.9	6.7	6.7	very rare	very brief	none	---	---	---	---
	wet	4.9	6.7	6.7	6.7	6.7	6.7							
September	moist	0.0	0.0	0.0	3.6	4.9	6.7	rare	very brief	none	---	---	---	---
	wet	3.6	4.9	6.7	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	3.0	4.6	6.7	rare	very brief	none	---	---	---	---
	wet	3.0	4.6	6.7	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	2.3	3.3	4.9	rare	very brief	none	---	---	---	---
	wet	2.3	3.3	4.9	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	3.3	4.1	5.7	none	---	none	---	---	---	---
	wet	3.3	4.1	5.7	6.7	6.7	6.7							

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

B109A (continued)

Seelyeville (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.5-1.0-3.3	none	---	occasional	long	0.0-0.3-0.5
	wet	0.5-1.0-3.3	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.3-1.6-4.1	none	---	occasional	long	0.0-0.3-0.5
	wet	1.3-1.6-4.1	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.5	frequent	very long	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-2.5	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	very frequent	very long	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	very frequent	long	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.3-1.6	frequent	long	frequent	brief	0.0-0.5-1.0
	wet	0.0-0.3-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.0-0.8-2.5	frequent	brief	occasional	very brief	0.0-0.3-0.5
	wet	0.0-0.8-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.5-1.6-3.3	frequent	brief	occasional	very brief	0.0-0.3-0.5
	wet	0.5-1.6-3.3	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.3-1.1-3.0	frequent	brief	occasional	very brief	0.0-0.3-0.5
	wet	0.3-1.1-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.0-0.5-2.5	frequent	brief	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.0-0.3-1.6	rare	long	occasional	long	0.0-0.3-0.5
	wet	0.0-0.3-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.5-0.8-2.5	none	---	occasional	long	0.0-0.3-0.5
	wet	0.5-0.8-2.5	6.7-6.7-6.7					

Water (5 percent of the map unit) (not applicable)

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B200A Garnes fine sandy loam, 0 to 3 percent slopes

Garnes (70 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.1-5.4-6.7	none	---	none	---	---
	wet	4.1-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	4.9-5.9-6.7	none	---	none	---	---
	wet	4.9-5.9-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.9-6.7	none	---	none	---	---
	wet	3.3-4.9-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.8-2.5-4.1	none	---	none	---	---
	wet	1.8-2.5-4.1	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.3-2.8-4.9	none	---	none	---	---
	wet	2.3-2.8-4.9	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	2.6-3.1-5.7	none	---	none	---	---
	wet	2.6-3.1-5.7	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	3.3-5.7-6.7	none	---	none	---	---
	wet	3.3-5.7-6.7	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	4.9-6.7-6.7	none	---	none	---	---
	wet	4.9-6.7-6.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	3.6-4.9-6.7	none	---	none	---	---
	wet	3.6-4.9-6.7	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	3.0-4.3-5.7	none	---	none	---	---
	wet	3.0-4.3-5.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.3-3.3-4.9	none	---	none	---	---
	wet	2.3-3.3-4.9	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.3-4.6-5.7	none	---	none	---	---
	wet	3.3-4.6-5.7	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

B200A (continued)

Chilgren (13 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.3-2.1-3.3	none	---	none	---	---
	wet	1.3-2.1-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.3-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.3-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.7-1.3-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.7-1.3-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	2.0-3.3-4.9	none	---	rare	very brief	0.0-0.3-0.5
	wet	2.0-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.3-1.6-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Eckvoll (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.6-5.4-6.7	none	---	none	---	---
	wet	4.6-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	4.9-5.7-6.7	none	---	none	---	---
	wet	4.9-5.7-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	2.1-2.5-4.6	none	---	none	---	---
	wet	2.1-2.5-4.6	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.6-3.1-5.2	none	---	none	---	---
	wet	2.6-3.1-5.2	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	2.6-3.8-6.2	none	---	none	---	---
	wet	2.6-3.8-6.2	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	3.8-4.9-6.7	none	---	none	---	---
	wet	3.8-4.9-6.7	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	5.2-6.7-6.7	none	---	none	---	---
	wet	5.2-6.7-6.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	3.8-4.1-6.7	none	---	none	---	---
	wet	3.8-4.1-6.7	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	3.3-3.8-6.7	none	---	none	---	---
	wet	3.3-3.8-6.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.5-3.3-5.6	none	---	none	---	---
	wet	2.5-3.3-5.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.8-4.1-6.2	none	---	none	---	---
	wet	3.8-4.1-6.2	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

B200A (continued)

Garnes, very stony (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.1-5.4-6.7	none	---	none	---	---
	wet	4.1-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	4.9-5.9-6.7	none	---	none	---	---
	wet	4.9-5.9-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.9-6.7	none	---	none	---	---
	wet	3.3-4.9-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.8-2.5-4.1	none	---	none	---	---
	wet	1.8-2.5-4.1	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.3-2.8-4.9	none	---	none	---	---
	wet	2.0-2.8-4.9	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	2.6-3.1-5.7	none	---	none	---	---
	wet	2.6-3.1-5.7	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	3.3-5.7-6.7	none	---	none	---	---
	wet	3.3-5.7-6.7	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	4.9-6.7-6.7	none	---	none	---	---
	wet	4.9-6.7-6.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	3.6-4.9-6.7	none	---	none	---	---
	wet	3.6-4.9-6.7	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	3.0-4.3-5.7	none	---	none	---	---
	wet	3.0-4.3-5.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.3-3.3-4.9	none	---	none	---	---
	wet	2.3-3.3-4.9	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.3-4.6-5.7	none	---	none	---	---
	wet	3.3-4.6-5.7	6.7-6.7-6.7					

Grygla (4 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

B200A (continued)

Pelan (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.8-5.4-6.7	none	---	none	---	---
	wet	4.8-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	5.2-5.7-6.7	none	---	none	---	---
	wet	5.2-5.7-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.3-2.5-4.9	none	---	none	---	---
	wet	1.3-2.5-4.9	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.0-3.0-5.6	none	---	none	---	---
	wet	2.0-3.0-5.6	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	2.6-3.6-6.2	none	---	none	---	---
	wet	2.6-3.6-6.2	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	3.9-5.4-6.7	none	---	none	---	---
	wet	3.9-5.4-6.7	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	5.4-6.7-6.7	none	---	none	---	---
	wet	5.4-6.7-6.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	4.1-4.6-6.7	none	---	none	---	---
	wet	4.1-4.6-6.7	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	3.6-3.9-6.7	none	---	none	---	---
	wet	3.6-3.9-6.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.5-3.3-5.7	none	---	none	---	---
	wet	2.5-3.3-5.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.9-4.6-6.2	none	---	none	---	---
	wet	3.9-4.6-6.2	6.7-6.7-6.7					

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B201A Chilgren fine sandy loam, 0 to 2 percent slopes

Chilgren (75 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.3-2.1-3.3	none	---	none	---	---
	wet	1.3-2.1-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.3-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.3-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.7-1.3-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.7-1.3-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	2.0-3.3-4.9	none	---	rare	very brief	0.0-0.3-0.5
	wet	2.0-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.3-1.6-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

B201A (continued)

Garnes (9 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.1-5.4-6.7	none	---	none	---	---
	wet	4.1-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	4.9-5.9-6.7	none	---	none	---	---
	wet	4.9-5.9-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.9-6.7	none	---	none	---	---
	wet	3.3-4.9-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.8-2.5-4.1	none	---	none	---	---
	wet	1.8-2.5-4.1	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.3-2.8-4.9	none	---	none	---	---
	wet	2.3-2.8-4.9	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	2.6-3.1-5.7	none	---	none	---	---
	wet	2.6-3.1-5.7	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	3.3-5.7-6.7	none	---	none	---	---
	wet	3.3-5.7-6.7	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	4.9-6.7-6.7	none	---	none	---	---
	wet	4.9-6.7-6.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	3.6-4.9-6.7	none	---	none	---	---
	wet	3.6-4.9-6.7	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	3.0-4.3-5.7	none	---	none	---	---
	wet	3.0-4.3-5.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.3-3.3-4.9	none	---	none	---	---
	wet	2.3-3.3-4.9	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.3-4.6-5.7	none	---	none	---	---
	wet	3.3-4.6-5.7	6.7-6.7-6.7					

Grygla (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

B201A (continued)

Grygla, depressional (5 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	1.0	1.6	3.0	none	---	occasional	long	0.0-0.3-0.5		
	wet	1.0	1.6	3.0	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	1.6	3.0	3.6	none	---	occasional	long	0.0-0.3-0.5		
	wet	1.6	3.0	3.6	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	0.0	0.0	2.0	none	---	occasional	long	0.0-0.3-0.5		
	wet	0.0	0.0	2.0	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	0.0	0.0	1.0	none	---	frequent	long	0.0-0.3-0.8		
	wet	0.0	0.0	1.0	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	0.0	0.0	2.0	none	---	frequent	long	0.0-0.3-0.8		
	wet	0.0	0.0	2.0	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	0.2	0.8	2.5	none	---	occasional	brief	0.0-0.3-0.5		
	wet	0.2	0.8	2.5	6.7	6.7	6.7							
July	moist	0.0	0.0	0.0	0.7	1.6	3.3	none	---	rare	very brief	0.0-0.2-0.3		
	wet	0.7	1.6	3.3	6.7	6.7	6.7							
August	moist	0.0	0.0	0.0	1.6	2.5	3.6	none	---	rare	very brief	0.0-0.2-0.3		
	wet	1.6	2.5	3.6	6.7	6.7	6.7							
September	moist	0.0	0.0	0.0	1.0	1.6	3.0	none	---	rare	very brief	0.0-0.2-0.3		
	wet	1.0	1.6	3.0	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	0.7	1.3	2.6	none	---	occasional	brief	0.0-0.3-0.5		
	wet	0.7	1.3	2.6	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	0.3	0.8	1.6	none	---	occasional	long	0.0-0.3-0.5		
	wet	0.3	0.8	1.6	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	0.7	1.3	2.3	none	---	occasional	long	0.0-0.3-0.5		
	wet	0.7	1.3	2.3	6.7	6.7	6.7							

Hamre (5 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	0.8	1.6	3.3	none	---	occasional	long	0.0-0.5-1.0		
	wet	0.8	1.6	3.3	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	1.6	2.5	4.1	none	---	occasional	long	0.0-0.5-1.0		
	wet	1.6	2.5	4.1	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	0.0	0.0	2.5	none	---	occasional	long	0.0-0.5-1.0		
	wet	0.0	0.0	2.5	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	0.0	0.0	0.8	none	---	frequent	long	0.0-0.5-1.0		
	wet	0.0	0.0	0.8	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	0.0	0.0	1.3	none	---	frequent	long	0.0-0.5-1.0		
	wet	0.0	0.0	1.3	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	0.0	0.5	1.6	none	---	frequent	brief	0.0-0.5-1.0		
	wet	0.0	0.5	1.6	6.7	6.7	6.7							
July	moist	0.0	0.0	0.0	0.2	0.8	2.5	none	---	rare	very brief	0.0-0.3-0.5		
	wet	0.2	0.8	2.5	6.7	6.7	6.7							
August	moist	0.0	0.0	0.0	0.8	1.6	3.3	none	---	rare	very brief	0.0-0.3-0.5		
	wet	0.8	1.6	3.3	6.7	6.7	6.7							
September	moist	0.0	0.0	0.0	0.5	1.3	3.0	none	---	occasional	brief	0.0-0.3-0.5		
	wet	0.5	1.3	3.0	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	0.3	0.8	2.5	none	---	occasional	brief	0.0-0.5-1.0		
	wet	0.3	0.8	2.5	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	0.0	0.3	1.6	none	---	occasional	long	0.0-0.5-1.0		
	wet	0.0	0.3	1.6	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	0.5	1.3	2.5	none	---	occasional	long	0.0-0.5-1.0		
	wet	0.5	1.3	2.5	6.7	6.7	6.7							

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

B201A (continued)

Pelan (1 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	4.8	5.4	6.7	none	---	none	---	---	---	---
	wet	4.8	5.4	6.7	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	5.2	5.7	6.7	none	---	none	---	---	---	---
	wet	5.2	5.7	6.7	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	3.3	4.6	6.7	none	---	none	---	---	---	---
	wet	3.3	4.6	6.7	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	1.3	2.5	4.9	none	---	none	---	---	---	---
	wet	1.3	2.5	4.9	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	2.0	3.0	5.6	none	---	none	---	---	---	---
	wet	2.0	3.0	5.6	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	2.6	3.6	6.2	none	---	none	---	---	---	---
	wet	2.6	3.6	6.2	6.7	6.7	6.7							
July	moist	0.0	0.0	0.0	3.9	5.4	6.7	none	---	none	---	---	---	---
	wet	3.9	5.4	6.7	6.7	6.7	6.7							
August	moist	0.0	0.0	0.0	5.4	6.7	6.7	none	---	none	---	---	---	---
	wet	5.4	6.7	6.7	6.7	6.7	6.7							
September	moist	0.0	0.0	0.0	4.1	4.6	6.7	none	---	none	---	---	---	---
	wet	4.1	4.6	6.7	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	3.6	3.9	6.7	none	---	none	---	---	---	---
	wet	3.6	3.9	6.7	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	2.5	3.3	5.7	none	---	none	---	---	---	---
	wet	2.5	3.3	5.7	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	3.9	4.6	6.2	none	---	none	---	---	---	---
	wet	3.9	4.6	6.2	6.7	6.7	6.7							

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B202A Cathro muck, depressional, MLRA 88, 0 to 1 percent slopes

Cathro (80 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	0.5	1.3	3.3	none	---	occasional	long	0.0	0.3	0.5
	wet	0.5	1.3	3.3	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	1.3	2.1	4.1	none	---	occasional	long	0.0	0.3	0.5
	wet	1.3	2.1	4.1	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	0.0	0.0	2.5	none	---	occasional	long	0.0	0.5	1.0
	wet	0.0	0.0	2.5	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	0.0	0.0	0.8	none	---	frequent	long	0.0	0.5	1.0
	wet	0.0	0.0	0.8	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	0.0	0.0	1.3	none	---	frequent	long	0.0	0.5	1.0
	wet	0.0	0.0	1.3	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	0.0	0.0	1.6	none	---	occasional	brief	0.0	0.5	1.0
	wet	0.0	0.0	1.6	6.7	6.7	6.7							
July	moist	0.0	0.0	0.0	0.2	0.8	2.5	none	---	rare	very brief	0.0	0.3	0.5
	wet	0.2	0.8	2.5	6.7	6.7	6.7							
August	moist	0.0	0.0	0.0	0.8	1.6	3.3	none	---	rare	very brief	0.0	0.3	0.5
	wet	0.8	1.6	3.3	6.7	6.7	6.7							
September	moist	0.0	0.0	0.0	0.3	1.1	3.0	none	---	rare	brief	0.0	0.3	0.5
	wet	0.3	1.1	3.0	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	0.2	0.5	2.5	none	---	occasional	brief	0.0	0.3	0.5
	wet	0.2	0.5	2.5	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	0.0	0.3	1.6	none	---	occasional	long	0.0	0.3	0.5
	wet	0.0	0.3	1.6	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	0.5	0.8	2.5	none	---	occasional	long	0.0	0.3	0.5
	wet	0.5	0.8	2.5	6.7	6.7	6.7							

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

B202A (continued)

Hamre (8 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	occasional	long	0.0-0.5-1.0
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.6-2.5-4.1	none	---	occasional	long	0.0-0.5-1.0
	wet	1.6-2.5-4.1	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-2.5	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.5-1.6	none	---	frequent	brief	0.0-0.5-1.0
	wet	0.0-0.5-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.2-0.8-2.5	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.2-0.8-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.5-1.3-3.0	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-1.3-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.3-0.8-2.5	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.3-0.8-2.5	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.0-0.3-1.6	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.3-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					

Chilgren (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.3-2.1-3.3	none	---	none	---	---
	wet	1.3-2.1-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.3-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.3-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.7-1.3-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.7-1.3-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	2.0-3.3-4.9	none	---	rare	very brief	0.0-0.3-0.5
	wet	2.0-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.3-1.6-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

B202A (continued)

Northwood (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	occasional	long	0.0-0.5-1.0
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.6-2.5-4.1	none	---	occasional	long	0.0-0.5-1.0
	wet	1.6-2.5-4.1	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-2.5	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.5-1.6	none	---	frequent	brief	0.0-0.5-1.0
	wet	0.0-0.5-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.2-0.8-2.5	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.2-0.8-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.5-1.3-3.0	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-1.3-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.3-0.8-2.5	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.3-0.8-2.5	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.0-0.3-1.6	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.3-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					

Bernier (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.5-1.3-3.3	none	---	occasional	long	0.0-0.3-0.5
	wet	0.5-1.3-3.3	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	occasional	long	0.0-0.3-0.5
	wet	1.3-2.1-4.1	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-2.5	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.0-1.6	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.2-0.8-2.5	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.2-0.8-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.3-1.1-3.0	none	---	rare	brief	0.0-0.3-0.5
	wet	0.3-1.1-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.2-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.2-0.5-2.5	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.0-0.3-1.6	none	---	occasional	long	0.0-0.3-0.5
	wet	0.0-0.3-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.5-0.8-2.5	none	---	occasional	long	0.0-0.3-0.5
	wet	0.5-0.8-2.5	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

B202A (continued)

Grygla (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Seelyeville (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.5-1.0-3.3	none	---	occasional	long	0.0-0.3-0.5
	wet	0.5-1.0-3.3	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.3-1.6-4.1	none	---	occasional	long	0.0-0.3-0.5
	wet	1.3-1.6-4.1	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-2.5	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.3-1.6	none	---	frequent	brief	0.0-0.5-1.0
	wet	0.0-0.3-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.0-0.8-2.5	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.0-0.8-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.5-1.6-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-1.6-3.3	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.3-1.1-3.0	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.3-1.1-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.0-0.3-1.6	none	---	occasional	long	0.0-0.3-0.5
	wet	0.0-0.3-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.5-0.8-2.5	none	---	occasional	long	0.0-0.3-0.5
	wet	0.5-0.8-2.5	6.7-6.7-6.7					



Table 25.--Soil Moisture, Ponding, and Flooding--Continued

B203A (continued)

Grygla (7 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Berner (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.5-1.3-3.3	none	---	occasional	long	0.0-0.3-0.5
	wet	0.5-1.3-3.3	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	occasional	long	0.0-0.3-0.5
	wet	1.3-2.1-4.1	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-2.5	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.0-1.6	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.2-0.8-2.5	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.2-0.8-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.3-1.1-3.0	none	---	rare	brief	0.0-0.3-0.5
	wet	0.3-1.1-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.2-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.2-0.5-2.5	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.0-0.3-1.6	none	---	occasional	long	0.0-0.3-0.5
	wet	0.0-0.3-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.5-0.8-2.5	none	---	occasional	long	0.0-0.3-0.5
	wet	0.5-0.8-2.5	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

B203A (continued)

Chilgren (3 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth			
		L	R	H	L	R	H					L	R	H	
January	moist	0.0	0.0	0.0	1.6	3.0	4.1	none	---	none	---	---			
	wet	1.6	3.0	4.1	6.7	6.7	6.7								
February	moist	0.0	0.0	0.0	2.5	3.3	4.9	none	---	none	---	---			
	wet	2.5	3.3	4.9	6.7	6.7	6.7								
March	moist	0.0	0.0	0.0	1.3	2.1	3.3	none	---	none	---	---			
	wet	1.3	2.1	3.3	6.7	6.7	6.7								
April	moist	0.0	0.0	0.0	0.0	0.5	2.5	none	---	occasional	brief	0.0-0.3-0.5			
	wet	0.0	0.5	2.5	6.7	6.7	6.7								
May	moist	0.0	0.0	0.0	0.3	0.8	3.3	none	---	occasional	brief	0.0-0.3-0.5			
	wet	0.3	0.8	3.3	6.7	6.7	6.7								
June	moist	0.0	0.0	0.0	0.7	1.3	4.1	none	---	occasional	very brief	0.0-0.3-0.5			
	wet	0.7	1.3	4.1	6.7	6.7	6.7								
July	moist	0.0	0.0	0.0	1.6	3.0	4.9	none	---	none	---	---			
	wet	1.6	3.0	4.9	6.7	6.7	6.7								
August	moist	0.0	0.0	0.0	2.5	3.8	5.7	none	---	none	---	---			
	wet	2.5	3.8	5.7	6.7	6.7	6.7								
September	moist	0.0	0.0	0.0	2.0	3.3	4.9	none	---	rare	very brief	0.0-0.3-0.5			
	wet	2.0	3.3	4.9	6.7	6.7	6.7								
October	moist	0.0	0.0	0.0	1.3	1.6	4.1	none	---	rare	very brief	0.0-0.3-0.5			
	wet	1.3	1.6	4.1	6.7	6.7	6.7								
November	moist	0.0	0.0	0.0	0.8	1.3	3.3	none	---	occasional	brief	0.0-0.3-0.5			
	wet	0.8	1.3	3.3	6.7	6.7	6.7								
December	moist	0.0	0.0	0.0	1.3	2.1	3.8	none	---	none	---	---			
	wet	1.3	2.1	3.8	6.7	6.7	6.7								

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B204A Roliss loam, MLRA 88, 0 to 2 percent slopes

Roliss (75 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth			
		L	R	H	L	R	H					L	R	H	
January	moist	0.0	0.0	0.0	1.6	3.0	4.1	none	---	none	---	---			
	wet	1.6	3.0	4.1	6.7	6.7	6.7								
February	moist	0.0	0.0	0.0	2.5	3.3	4.9	none	---	none	---	---			
	wet	2.5	3.3	4.9	6.7	6.7	6.7								
March	moist	0.0	0.0	0.0	1.3	2.1	3.3	none	---	none	---	---			
	wet	1.3	2.1	3.3	6.7	6.7	6.7								
April	moist	0.0	0.0	0.0	0.0	0.5	2.5	none	---	occasional	brief	0.0-0.3-0.5			
	wet	0.0	0.5	2.5	6.7	6.7	6.7								
May	moist	0.0	0.0	0.0	0.3	0.8	3.3	none	---	occasional	brief	0.0-0.3-0.5			
	wet	0.3	0.8	3.3	6.7	6.7	6.7								
June	moist	0.0	0.0	0.0	0.7	1.3	4.1	none	---	occasional	very brief	0.0-0.3-0.5			
	wet	0.7	1.3	4.1	6.7	6.7	6.7								
July	moist	0.0	0.0	0.0	1.6	3.0	4.9	none	---	none	---	---			
	wet	1.6	3.0	4.9	6.7	6.7	6.7								
August	moist	0.0	0.0	0.0	2.5	3.8	5.7	none	---	none	---	---			
	wet	2.5	3.8	5.7	6.7	6.7	6.7								
September	moist	0.0	0.0	0.0	2.0	3.3	4.9	none	---	rare	very brief	0.0-0.3-0.5			
	wet	2.0	3.3	4.9	6.7	6.7	6.7								
October	moist	0.0	0.0	0.0	1.3	1.6	4.1	none	---	rare	very brief	0.0-0.3-0.5			
	wet	1.3	1.6	4.1	6.7	6.7	6.7								
November	moist	0.0	0.0	0.0	0.8	1.3	3.3	none	---	occasional	brief	0.0-0.3-0.5			
	wet	0.8	1.3	3.3	6.7	6.7	6.7								
December	moist	0.0	0.0	0.0	1.3	2.1	3.8	none	---	none	---	---			
	wet	1.3	2.1	3.8	6.7	6.7	6.7								

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

B204A (continued)

Grygla (8 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Chilgren (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.3-2.1-3.3	none	---	none	---	---
	wet	1.3-2.1-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.3-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.3-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.7-1.3-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.7-1.3-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	2.0-3.3-4.9	none	---	rare	very brief	0.0-0.3-0.5
	wet	2.0-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.3-1.6-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

B204A (continued)

Garnes (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.1-5.4-6.7	none	---	none	---	---
	wet	4.1-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	4.9-5.9-6.7	none	---	none	---	---
	wet	4.9-5.9-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.9-6.7	none	---	none	---	---
	wet	3.3-4.9-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.8-2.5-4.1	none	---	none	---	---
	wet	1.8-2.5-4.1	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.3-2.8-4.9	none	---	none	---	---
	wet	2.3-2.8-4.9	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	2.6-3.1-5.7	none	---	none	---	---
	wet	2.6-3.1-5.7	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	3.3-5.7-6.7	none	---	none	---	---
	wet	3.3-5.7-6.7	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	4.9-6.7-6.7	none	---	none	---	---
	wet	4.9-6.7-6.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	3.6-4.9-6.7	none	---	none	---	---
	wet	3.6-4.9-6.7	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	3.0-4.3-5.7	none	---	none	---	---
	wet	3.0-4.3-5.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.3-3.3-4.9	none	---	none	---	---
	wet	2.3-3.3-4.9	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.3-4.6-5.7	none	---	none	---	---
	wet	3.3-4.6-5.7	6.7-6.7-6.7					

Roliss, depressional (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.8-1.6-3.0	none	---	occasional	long	0.0-0.5-1.0
	wet	0.8-1.6-3.0	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.6-2.5-3.3	none	---	occasional	long	0.0-0.5-1.0
	wet	1.6-2.5-3.3	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-1.6	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.6	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.2-0.8-2.5	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.2-0.8-2.5	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.8-1.6-3.0	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-3.0	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	1.6-2.1-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.6-2.1-3.3	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.8-1.6-3.0	none	---	rare	brief	0.0-0.3-0.5
	wet	0.8-1.6-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.2-0.5-1.6	none	---	occasional	long	0.0-0.5-1.0
	wet	0.2-0.5-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.3-0.8-2.0	none	---	occasional	long	0.0-0.5-1.0
	wet	0.3-0.8-2.0	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

B204A (continued)

Hamre (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	occasional	long	0.0-0.5-1.0
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.6-2.5-4.1	none	---	occasional	long	0.0-0.5-1.0
	wet	1.6-2.5-4.1	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-2.5	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.5-1.6	none	---	frequent	brief	0.0-0.5-1.0
	wet	0.0-0.5-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.2-0.8-2.5	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.2-0.8-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.5-1.3-3.0	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-1.3-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.3-0.8-2.5	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.3-0.8-2.5	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.0-0.3-1.6	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.3-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					

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B205A Berner muck, depressional, MLRA 88, 0 to 1 percent slopes

Berner (80 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.5-1.3-3.3	none	---	occasional	long	0.0-0.3-0.5
	wet	0.5-1.3-3.3	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	occasional	long	0.0-0.3-0.5
	wet	1.3-2.1-4.1	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-2.5	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.0-1.6	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.2-0.8-2.5	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.2-0.8-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.3-1.1-3.0	none	---	rare	brief	0.0-0.3-0.5
	wet	0.3-1.1-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.2-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.2-0.5-2.5	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.0-0.3-1.6	none	---	occasional	long	0.0-0.3-0.5
	wet	0.0-0.3-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.5-0.8-2.5	none	---	occasional	long	0.0-0.3-0.5
	wet	0.5-0.8-2.5	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

B205A (continued)

Northwood (7 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	occasional	long	0.0-0.5-1.0
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.6-2.5-4.1	none	---	occasional	long	0.0-0.5-1.0
	wet	1.6-2.5-4.1	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-2.5	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.5-1.6	none	---	frequent	brief	0.0-0.5-1.0
	wet	0.0-0.5-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.2-0.8-2.5	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.2-0.8-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.5-1.3-3.0	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-1.3-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.3-0.8-2.5	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.3-0.8-2.5	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.0-0.3-1.6	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.3-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					

Grygla (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

B205A (continued)

Cathro (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.5-1.3-3.3	none	---	occasional	long	0.0-0.3-0.5
	wet	0.5-1.3-3.3	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	occasional	long	0.0-0.3-0.5
	wet	1.3-2.1-4.1	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-2.5	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.0-1.6	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.2-0.8-2.5	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.2-0.8-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.3-1.1-3.0	none	---	rare	brief	0.0-0.3-0.5
	wet	0.3-1.1-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.2-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.2-0.5-2.5	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.0-0.3-1.6	none	---	occasional	long	0.0-0.3-0.5
	wet	0.0-0.3-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.5-0.8-2.5	none	---	occasional	long	0.0-0.3-0.5
	wet	0.5-0.8-2.5	6.7-6.7-6.7					

Hamre (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	occasional	long	0.0-0.5-1.0
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.6-2.5-4.1	none	---	occasional	long	0.0-0.5-1.0
	wet	1.6-2.5-4.1	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-2.5	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.5-1.6	none	---	frequent	brief	0.0-0.5-1.0
	wet	0.0-0.5-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.2-0.8-2.5	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.2-0.8-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.5-1.3-3.0	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-1.3-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.3-0.8-2.5	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.3-0.8-2.5	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.0-0.3-1.6	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.3-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

B205A (continued)

Seelyeville (2 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	0.5	1.0	3.3	none	---	occasional	long	0.0	0.3	0.5
	wet	0.5	1.0	3.3	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	1.3	1.6	4.1	none	---	occasional	long	0.0	0.3	0.5
	wet	1.3	1.6	4.1	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	0.0	0.0	2.5	none	---	occasional	long	0.0	0.5	1.0
	wet	0.0	0.0	2.5	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	0.0	0.0	0.8	none	---	frequent	long	0.0	0.5	1.0
	wet	0.0	0.0	0.8	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	0.0	0.0	1.3	none	---	frequent	long	0.0	0.5	1.0
	wet	0.0	0.0	1.3	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	0.0	0.3	1.6	none	---	frequent	brief	0.0	0.5	1.0
	wet	0.0	0.3	1.6	6.7	6.7	6.7							
July	moist	0.0	0.0	0.0	0.0	0.8	2.5	none	---	occasional	very brief	0.0	0.3	0.5
	wet	0.0	0.8	2.5	6.7	6.7	6.7							
August	moist	0.0	0.0	0.0	0.5	1.6	3.3	none	---	occasional	very brief	0.0	0.3	0.5
	wet	0.5	1.6	3.3	6.7	6.7	6.7							
September	moist	0.0	0.0	0.0	0.3	1.1	3.0	none	---	occasional	very brief	0.0	0.3	0.5
	wet	0.3	1.1	3.0	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	0.0	0.5	2.5	none	---	occasional	brief	0.0	0.3	0.5
	wet	0.0	0.5	2.5	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	0.0	0.3	1.6	none	---	occasional	long	0.0	0.3	0.5
	wet	0.0	0.3	1.6	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	0.5	0.8	2.5	none	---	occasional	long	0.0	0.3	0.5
	wet	0.5	0.8	2.5	6.7	6.7	6.7							

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B206A Hamre muck, depressional, MLRA 88, 0 to 1 percent slopes

Hamre (80 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	0.8	1.6	3.3	none	---	occasional	long	0.0	0.5	1.0
	wet	0.8	1.6	3.3	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	1.6	2.5	4.1	none	---	occasional	long	0.0	0.5	1.0
	wet	1.6	2.5	4.1	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	0.0	0.0	2.5	none	---	occasional	long	0.0	0.5	1.0
	wet	0.0	0.0	2.5	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	0.0	0.0	0.8	none	---	frequent	long	0.0	0.5	1.0
	wet	0.0	0.0	0.8	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	0.0	0.0	1.3	none	---	frequent	long	0.0	0.5	1.0
	wet	0.0	0.0	1.3	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	0.0	0.5	1.6	none	---	frequent	brief	0.0	0.5	1.0
	wet	0.0	0.5	1.6	6.7	6.7	6.7							
July	moist	0.0	0.0	0.0	0.2	0.8	2.5	none	---	rare	very brief	0.0	0.3	0.5
	wet	0.2	0.8	2.5	6.7	6.7	6.7							
August	moist	0.0	0.0	0.0	0.8	1.6	3.3	none	---	rare	very brief	0.0	0.3	0.5
	wet	0.8	1.6	3.3	6.7	6.7	6.7							
September	moist	0.0	0.0	0.0	0.5	1.3	3.0	none	---	occasional	brief	0.0	0.3	0.5
	wet	0.5	1.3	3.0	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	0.3	0.8	2.5	none	---	occasional	brief	0.0	0.5	1.0
	wet	0.3	0.8	2.5	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	0.0	0.3	1.6	none	---	occasional	long	0.0	0.5	1.0
	wet	0.0	0.3	1.6	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	0.5	1.3	2.5	none	---	occasional	long	0.0	0.5	1.0
	wet	0.5	1.3	2.5	6.7	6.7	6.7							

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

B206A (continued)

Chilgren (8 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.3-2.1-3.3	none	---	none	---	---
	wet	1.3-2.1-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.3-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.3-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.7-1.3-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.7-1.3-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	2.0-3.3-4.9	none	---	rare	very brief	0.0-0.3-0.5
	wet	2.0-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.3-1.6-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Northwood (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	occasional	long	0.0-0.5-1.0
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.6-2.5-4.1	none	---	occasional	long	0.0-0.5-1.0
	wet	1.6-2.5-4.1	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-2.5	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.5-1.6	none	---	frequent	brief	0.0-0.5-1.0
	wet	0.0-0.5-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.2-0.8-2.5	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.2-0.8-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.5-1.3-3.0	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-1.3-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.3-0.8-2.5	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.3-0.8-2.5	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.0-0.3-1.6	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.3-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

B206A (continued)

Cathro (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.5-1.3-3.3	none	---	occasional	long	0.0-0.3-0.5
	wet	0.5-1.3-3.3	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	occasional	long	0.0-0.3-0.5
	wet	1.3-2.1-4.1	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-2.5	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.0-1.6	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.2-0.8-2.5	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.2-0.8-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.3-1.1-3.0	none	---	rare	brief	0.0-0.3-0.5
	wet	0.3-1.1-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.2-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.2-0.5-2.5	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.0-0.3-1.6	none	---	occasional	long	0.0-0.3-0.5
	wet	0.0-0.3-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.5-0.8-2.5	none	---	occasional	long	0.0-0.3-0.5
	wet	0.5-0.8-2.5	6.7-6.7-6.7					

Grygla (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

B206A (continued)

Roliss (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.3-2.1-3.3	none	---	none	---	---
	wet	1.3-2.1-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.3-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.3-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.7-1.3-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.7-1.3-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	2.0-3.3-4.9	none	---	rare	very brief	0.0-0.3-0.5
	wet	2.0-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.3-1.6-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

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I1A Augsburg loam, 0 to 2 percent slopes

Augsburg (75 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.0-2.6-4.9	none	---	none	---	---
	wet	2.0-2.6-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.5-2.3-4.9	none	---	none	---	---
	wet	1.5-2.3-4.9	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	occasional	brief	0.0-0.3-0.5
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.0-3.9	none	---	none	---	---
	wet	1.3-2.0-3.9	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

11A (continued)

Borup (10 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.3-2.1-3.3	none	---	none	---	---
	wet	1.3-2.1-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.3-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.3-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.7-1.3-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.7-1.3-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	2.0-3.3-4.9	none	---	rare	very brief	0.0-0.1-0.3
	wet	2.0-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-1.6-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-1.6-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	very brief	0.0-0.1-0.3
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Foxlake (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.8-2.1-4.1	none	---	none	---	---
	wet	0.8-2.1-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.6-2.5-4.9	none	---	none	---	---
	wet	1.6-2.5-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.3-1.3-3.3	none	---	none	---	---
	wet	0.3-1.3-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-1.6	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.3-2.1-4.1	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	occasional	very brief	0.0-0.2-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

11A (continued)

Augsburg, depressional (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.0-1.6-3.0	none	---	occasional	long	0.0-0.5-1.0
	wet	1.0-1.6-3.0	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.6-3.0-3.6	none	---	occasional	long	0.0-0.5-1.0
	wet	1.6-3.0-3.6	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.0	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-2.0	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-1.0	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.0	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-2.0	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-2.0	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.2-0.8-2.5	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.2-0.8-2.5	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.7-1.6-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.7-1.6-3.3	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	1.6-2.5-3.6	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.6-2.5-3.6	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.0-1.6-3.0	none	---	occasional	brief	0.0-0.3-0.5
	wet	1.0-1.6-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.7-1.3-2.6	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.7-1.3-2.6	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.3-0.8-1.6	none	---	occasional	long	0.0-0.5-1.0
	wet	0.3-0.8-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.7-1.3-2.3	none	---	occasional	long	0.0-0.5-1.0
	wet	0.7-1.3-2.3	6.7-6.7-6.7					

Wheatville (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	2.5-3.0-5.7	none	---	none	---	---
	wet	2.5-3.0-5.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.7-1.3-3.3	none	---	none	---	---
	wet	0.7-1.3-3.3	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	1.0-1.6-4.1	none	---	none	---	---
	wet	1.0-1.6-4.1	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	1.6-2.5-4.9	none	---	none	---	---
	wet	1.6-2.5-4.9	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	2.5-3.8-6.2	none	---	none	---	---
	wet	2.5-3.8-6.2	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	3.8-6.7-6.7					
September	wet	3.8-6.7-6.7	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.0	2.5-3.8-6.2					
October	wet	2.5-3.8-6.2	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.0	2.0-3.0-5.6					
November	wet	2.0-3.0-5.6	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.0	1.6-2.5-4.9					
December	wet	1.6-2.5-4.9	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.0	2.0-3.3-5.4					
	wet	2.0-3.3-5.4	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

11A (continued)

Glyndon (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.5-4.1-6.7	none	---	none	---	---
	wet	2.5-4.1-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	3.3-4.9-6.7	none	---	none	---	---
	wet	3.3-4.9-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	2.5-3.9-5.7	none	---	none	---	---
	wet	2.5-3.9-5.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.7-1.0-3.3	none	---	none	---	---
	wet	0.7-1.0-3.3	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	1.0-1.6-4.1	none	---	none	---	---
	wet	1.0-1.6-4.1	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	1.6-2.5-4.9	none	---	none	---	---
	wet	1.6-2.5-4.9	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.2	none	---	none	---	---
	moist	0.0-0.0-0.2	2.5-3.9-6.7					
August	wet	2.5-3.9-6.7	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.3					
September	moist	0.0-0.0-0.3	3.3-6.7-6.7	none	---	none	---	---
	wet	3.3-6.7-6.7	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	2.5-4.6-6.2	none	---	none	---	---
	wet	2.5-4.6-6.2	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.0-4.1-5.7	none	---	none	---	---
	wet	2.0-4.1-5.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	2.0-3.8-4.9	none	---	none	---	---
	wet	2.0-3.8-4.9	6.7-6.7-6.7					

Espelie (1 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.0-2.6-4.9	none	---	none	---	---
	wet	2.0-2.6-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.5-2.3-4.9	none	---	none	---	---
	wet	1.5-2.3-4.9	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.0-3.9	none	---	none	---	---
	wet	1.3-2.0-3.9	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I1A (continued)

Hattie (1 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	4.1	5.7	6.7	none	---	none	---	---	---	---
	wet	4.1	5.7	6.7	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	4.9	6.7	6.7	none	---	none	---	---	---	---
	wet	4.9	6.7	6.7	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	4.1	5.7	6.7	none	---	none	---	---	---	---
	wet	4.1	5.7	6.7	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	1.3	2.1	4.1	none	---	none	---	---	---	---
	wet	1.3	2.1	4.1	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	1.6	2.5	4.1	none	---	none	---	---	---	---
	wet	1.6	2.5	4.1	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	2.0	3.0	5.7	none	---	none	---	---	---	---
	wet	2.0	3.0	5.7	6.7	6.7	6.7							
July	moist	0.0	0.0	0.0	2.5	4.1	6.7	none	---	none	---	---	---	---
	wet	2.5	4.1	6.7	6.7	6.7	6.7							
August	moist	0.0	0.0	0.0	3.3	4.9	6.7	none	---	none	---	---	---	---
	wet	3.3	4.9	6.7	6.7	6.7	6.7							
September	moist	0.0	0.0	0.0	3.3	4.6	6.7	none	---	none	---	---	---	---
	wet	3.3	4.6	6.7	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	2.5	4.1	5.7	none	---	none	---	---	---	---
	wet	2.5	4.1	5.7	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	3.3	4.6	6.7	none	---	none	---	---	---	---
	wet	3.3	4.6	6.7	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	3.6	4.9	6.7	none	---	none	---	---	---	---
	wet	3.6	4.9	6.7	6.7	6.7	6.7							

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I2A Augsburg very fine sandy loam, 0 to 2 percent slopes

Augsburg (75 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	1.6	2.1	4.1	none	---	none	---	---	---	---
	wet	1.6	2.1	4.1	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	2.0	2.6	4.9	none	---	none	---	---	---	---
	wet	2.0	2.6	4.9	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	1.5	2.3	4.9	none	---	none	---	---	---	---
	wet	1.5	2.3	4.9	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	0.0	0.5	2.5	none	---	occasional	brief	0.0-0.3-0.5		
	wet	0.0	0.5	2.5	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	0.5	0.8	3.3	none	---	occasional	brief	0.0-0.3-0.5		
	wet	0.5	0.8	3.3	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	0.8	1.6	4.1	none	---	occasional	very brief	0.0-0.3-0.5		
	wet	0.8	1.6	4.1	6.7	6.7	6.7							
July	moist	0.0	0.0	0.0	1.6	3.0	4.9	none	---	none	---	---	---	---
	wet	1.6	3.0	4.9	6.7	6.7	6.7							
August	moist	0.0	0.0	0.0	2.5	3.8	5.7	none	---	none	---	---	---	---
	wet	2.5	3.8	5.7	6.7	6.7	6.7							
September	moist	0.0	0.0	0.0	1.6	3.3	4.9	none	---	rare	very brief	0.0-0.3-0.5		
	wet	1.6	3.3	4.9	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	1.3	2.5	4.1	none	---	occasional	brief	0.0-0.3-0.5		
	wet	1.3	2.5	4.1	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	0.8	1.6	3.3	none	---	occasional	brief	0.0-0.3-0.5		
	wet	0.8	1.6	3.3	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	1.3	2.0	3.9	none	---	none	---	---	---	---
	wet	1.3	2.0	3.9	6.7	6.7	6.7							

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I2A (continued)

Borup (10 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth			
		L	R	H	L	R	H					L	R	H	
January	moist	0.0	0.0	0.0	1.6	3.0	4.1	none	---	none	---	---			
	wet	1.6	3.0	4.1	6.7	6.7	6.7								
February	moist	0.0	0.0	0.0	2.5	3.3	4.9	none	---	none	---	---			
	wet	2.5	3.3	4.9	6.7	6.7	6.7								
March	moist	0.0	0.0	0.0	1.3	2.1	3.3	none	---	none	---	---			
	wet	1.3	2.1	3.3	6.7	6.7	6.7								
April	moist	0.0	0.0	0.0	0.0	0.5	2.5	none	---	occasional	brief	0.0-0.3-0.5			
	wet	0.0	0.5	2.5	6.7	6.7	6.7								
May	moist	0.0	0.0	0.0	0.3	0.8	3.3	none	---	occasional	brief	0.0-0.3-0.5			
	wet	0.3	0.8	3.3	6.7	6.7	6.7								
June	moist	0.0	0.0	0.0	0.7	1.3	4.1	none	---	occasional	very brief	0.0-0.3-0.5			
	wet	0.7	1.3	4.1	6.7	6.7	6.7								
July	moist	0.0	0.0	0.0	1.6	3.0	4.9	none	---	none	---	---			
	wet	1.6	3.0	4.9	6.7	6.7	6.7								
August	moist	0.0	0.0	0.0	2.5	3.8	5.7	none	---	none	---	---			
	wet	2.5	3.8	5.7	6.7	6.7	6.7								
September	moist	0.0	0.0	0.0	2.0	3.3	4.9	none	---	rare	very brief	0.0-0.1-0.3			
	wet	2.0	3.3	4.9	6.7	6.7	6.7								
October	moist	0.0	0.0	0.0	1.3	1.6	4.1	none	---	rare	very brief	0.0-0.1-0.3			
	wet	1.3	1.6	4.1	6.7	6.7	6.7								
November	moist	0.0	0.0	0.0	0.8	1.3	3.3	none	---	occasional	very brief	0.0-0.1-0.3			
	wet	0.8	1.3	3.3	6.7	6.7	6.7								
December	moist	0.0	0.0	0.0	1.3	2.1	3.8	none	---	none	---	---			
	wet	1.3	2.1	3.8	6.7	6.7	6.7								

Foxlake (5 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth			
		L	R	H	L	R	H					L	R	H	
January	moist	0.0	0.0	0.0	0.8	2.1	4.1	none	---	none	---	---			
	wet	0.8	2.1	4.1	6.7	6.7	6.7								
February	moist	0.0	0.0	0.0	1.6	2.5	4.9	none	---	none	---	---			
	wet	1.6	2.5	4.9	6.7	6.7	6.7								
March	moist	0.0	0.0	0.0	0.3	1.3	3.3	none	---	none	---	---			
	wet	0.3	1.3	3.3	6.7	6.7	6.7								
April	moist	0.0	0.0	0.0	0.0	0.0	1.6	none	---	occasional	brief	0.0-0.3-0.5			
	wet	0.0	0.0	1.6	6.7	6.7	6.7								
May	moist	0.0	0.0	0.0	0.0	0.5	2.5	none	---	occasional	brief	0.0-0.3-0.5			
	wet	0.0	0.5	2.5	6.7	6.7	6.7								
June	moist	0.0	0.0	0.0	0.8	1.3	3.3	none	---	occasional	very brief	0.0-0.3-0.5			
	wet	0.8	1.3	3.3	6.7	6.7	6.7								
July	moist	0.0	0.0	0.0	1.3	2.1	4.1	none	---	rare	very brief	0.0-0.2-0.3			
	wet	1.3	2.1	4.1	6.7	6.7	6.7								
August	moist	0.0	0.0	0.0	1.6	3.0	4.9	none	---	rare	very brief	0.0-0.2-0.3			
	wet	1.6	3.0	4.9	6.7	6.7	6.7								
September	moist	0.0	0.0	0.0	1.3	2.5	4.1	none	---	rare	very brief	0.0-0.2-0.3			
	wet	1.3	2.5	4.1	6.7	6.7	6.7								
October	moist	0.0	0.0	0.0	0.8	1.6	3.3	none	---	occasional	very brief	0.0-0.2-0.3			
	wet	0.8	1.6	3.3	6.7	6.7	6.7								
November	moist	0.0	0.0	0.0	0.5	1.3	2.5	none	---	occasional	brief	0.0-0.3-0.5			
	wet	0.5	1.3	2.5	6.7	6.7	6.7								
December	moist	0.0	0.0	0.0	0.8	1.6	3.3	none	---	none	---	---			
	wet	0.8	1.6	3.3	6.7	6.7	6.7								

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I2A (continued)

Augsburg, depressional (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.0-1.6-3.0	none	---	occasional	long	0.0-0.5-1.0
	wet	1.0-1.6-3.0	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.6-3.0-3.6	none	---	occasional	long	0.0-0.5-1.0
	wet	1.6-3.0-3.6	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.0	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-2.0	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-1.0	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.0	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-2.0	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-2.0	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.2-0.8-2.5	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.2-0.8-2.5	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.7-1.6-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.7-1.6-3.3	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	1.6-2.5-3.6	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.6-2.5-3.6	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.0-1.6-3.0	none	---	occasional	brief	0.0-0.3-0.5
	wet	1.0-1.6-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.7-1.3-2.6	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.7-1.3-2.6	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.3-0.8-1.6	none	---	occasional	long	0.0-0.5-1.0
	wet	0.3-0.8-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.7-1.3-2.3	none	---	occasional	long	0.0-0.5-1.0
	wet	0.7-1.3-2.3	6.7-6.7-6.7					

Wheatville (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	2.5-3.0-5.7	none	---	none	---	---
	wet	2.5-3.0-5.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.7-1.3-3.3	none	---	none	---	---
	wet	0.7-1.3-3.3	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	1.0-1.6-4.1	none	---	none	---	---
	wet	1.0-1.6-4.1	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	1.6-2.5-4.9	none	---	none	---	---
	wet	1.6-2.5-4.9	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	2.5-3.8-6.2	none	---	none	---	---
	wet	2.5-3.8-6.2	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	3.8-6.7-6.7					
September	wet	3.8-6.7-6.7	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.0	2.5-3.8-6.2					
October	wet	2.5-3.8-6.2	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.0	2.0-3.0-5.6					
November	wet	2.0-3.0-5.6	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.0	1.6-2.5-4.9					
December	wet	1.6-2.5-4.9	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.0	2.0-3.3-5.4					
	wet	2.0-3.3-5.4	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I2A (continued)

Glyndon (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.5-4.1-6.7	none	---	none	---	---
	wet	2.5-4.1-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	3.3-4.9-6.7	none	---	none	---	---
	wet	3.3-4.9-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	2.5-3.9-5.7	none	---	none	---	---
	wet	2.5-3.9-5.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.7-1.0-3.3	none	---	none	---	---
	wet	0.7-1.0-3.3	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	1.0-1.6-4.1	none	---	none	---	---
	wet	1.0-1.6-4.1	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	1.6-2.5-4.9	none	---	none	---	---
	wet	1.6-2.5-4.9	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.2	none	---	none	---	---
	moist	0.0-0.0-0.2	2.5-3.9-6.7					
August	wet	2.5-3.9-6.7	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.3					
September	moist	0.0-0.0-0.3	3.3-6.7-6.7	none	---	none	---	---
	wet	3.3-6.7-6.7	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	2.5-4.6-6.2	none	---	none	---	---
	wet	2.5-4.6-6.2	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.0-4.1-5.7	none	---	none	---	---
	wet	2.0-4.1-5.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	2.0-3.8-4.9	none	---	none	---	---
	wet	2.0-3.8-4.9	6.7-6.7-6.7					

Espelie (1 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.0-2.6-4.9	none	---	none	---	---
	wet	2.0-2.6-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.5-2.3-4.9	none	---	none	---	---
	wet	1.5-2.3-4.9	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.0-3.9	none	---	none	---	---
	wet	1.3-2.0-3.9	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I2A (continued)

Hattie (1 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth			
		L	R	H	L	R	H					L	R	H	
January	moist	0.0	0.0	0.0	4.1	5.7	6.7	none	---	none	---	---			
	wet	4.1	5.7	6.7	6.7	6.7	6.7								
February	moist	0.0	0.0	0.0	4.9	6.7	6.7	none	---	none	---	---			
	wet	4.9	6.7	6.7	6.7	6.7	6.7								
March	moist	0.0	0.0	0.0	4.1	5.7	6.7	none	---	none	---	---			
	wet	4.1	5.7	6.7	6.7	6.7	6.7								
April	moist	0.0	0.0	0.0	1.3	2.1	4.1	none	---	none	---	---			
	wet	1.3	2.1	4.1	6.7	6.7	6.7								
May	moist	0.0	0.0	0.0	1.6	2.5	4.1	none	---	none	---	---			
	wet	1.6	2.5	4.1	6.7	6.7	6.7								
June	moist	0.0	0.0	0.0	2.0	3.0	5.7	none	---	none	---	---			
	wet	2.0	3.0	5.7	6.7	6.7	6.7								
July	moist	0.0	0.0	0.0	2.5	4.1	6.7	none	---	none	---	---			
	wet	2.5	4.1	6.7	6.7	6.7	6.7								
August	moist	0.0	0.0	0.0	3.3	4.9	6.7	none	---	none	---	---			
	wet	3.3	4.9	6.7	6.7	6.7	6.7								
September	moist	0.0	0.0	0.0	3.3	4.6	6.7	none	---	none	---	---			
	wet	3.3	4.6	6.7	6.7	6.7	6.7								
October	moist	0.0	0.0	0.0	2.5	4.1	5.7	none	---	none	---	---			
	wet	2.5	4.1	5.7	6.7	6.7	6.7								
November	moist	0.0	0.0	0.0	3.3	4.6	6.7	none	---	none	---	---			
	wet	3.3	4.6	6.7	6.7	6.7	6.7								
December	moist	0.0	0.0	0.0	3.6	4.9	6.7	none	---	none	---	---			
	wet	3.6	4.9	6.7	6.7	6.7	6.7								

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I3A Berner muck, 0 to 1 percent slopes

Berner (80 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	0.5	1.3	3.3	none	---	occasional	long	0.0	0.3	0.5
	wet	0.5	1.3	3.3	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	1.3	2.1	4.1	none	---	occasional	long	0.0	0.3	0.5
	wet	1.3	2.1	4.1	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	0.0	0.0	2.5	none	---	occasional	long	0.0	0.5	1.0
	wet	0.0	0.0	2.5	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	0.0	0.0	0.8	none	---	frequent	long	0.0	0.5	1.0
	wet	0.0	0.0	0.8	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	0.0	0.0	1.3	none	---	frequent	long	0.0	0.5	1.0
	wet	0.0	0.0	1.3	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	0.0	0.0	1.6	none	---	occasional	brief	0.0	0.5	1.0
	wet	0.0	0.0	1.6	6.7	6.7	6.7							
July	moist	0.0	0.0	0.0	0.2	0.8	2.5	none	---	rare	very brief	0.0	0.3	0.5
	wet	0.2	0.8	2.5	6.7	6.7	6.7							
August	moist	0.0	0.0	0.0	0.8	1.6	3.3	none	---	rare	very brief	0.0	0.3	0.5
	wet	0.8	1.6	3.3	6.7	6.7	6.7							
September	moist	0.0	0.0	0.0	0.3	1.1	3.0	none	---	rare	brief	0.0	0.3	0.5
	wet	0.3	1.1	3.0	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	0.2	0.5	2.5	none	---	occasional	brief	0.0	0.3	0.5
	wet	0.2	0.5	2.5	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	0.0	0.3	1.6	none	---	occasional	long	0.0	0.3	0.5
	wet	0.0	0.3	1.6	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	0.5	0.8	2.5	none	---	occasional	long	0.0	0.3	0.5
	wet	0.5	0.8	2.5	6.7	6.7	6.7							

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I3A (continued)

Northwood (7 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	occasional	long	0.0-0.5-1.0
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.6-2.5-4.1	none	---	occasional	long	0.0-0.5-1.0
	wet	1.6-2.5-4.1	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-2.5	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.5-1.6	none	---	frequent	brief	0.0-0.5-1.0
	wet	0.0-0.5-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.2-0.8-2.5	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.2-0.8-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.5-1.3-3.0	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-1.3-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.3-0.8-2.5	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.3-0.8-2.5	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.0-0.3-1.6	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.3-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					

Kratka (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I3A (continued)

Hamre (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	occasional	long	0.0-0.5-1.0
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.6-2.5-4.1	none	---	occasional	long	0.0-0.5-1.0
	wet	1.6-2.5-4.1	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-2.5	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.5-1.6	none	---	frequent	brief	0.0-0.5-1.0
	wet	0.0-0.5-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.2-0.8-2.5	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.2-0.8-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.5-1.3-3.0	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-1.3-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.3-0.8-2.5	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.3-0.8-2.5	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.0-0.3-1.6	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.3-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					

Strathcona (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I3A (continued)

Seelyeville (2 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	0.5	1.0	3.3	none	---	occasional	long	0.0	0.3	0.5
	wet	0.5	1.0	3.3	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	1.3	1.6	4.1	none	---	occasional	long	0.0	0.3	0.5
	wet	1.3	1.6	4.1	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	0.0	0.0	2.5	none	---	occasional	long	0.0	0.5	1.0
	wet	0.0	0.0	2.5	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	0.0	0.0	0.8	none	---	frequent	long	0.0	0.5	1.0
	wet	0.0	0.0	0.8	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	0.0	0.0	1.3	none	---	frequent	long	0.0	0.5	1.0
	wet	0.0	0.0	1.3	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	0.0	0.3	1.6	none	---	frequent	brief	0.0	0.5	1.0
	wet	0.0	0.3	1.6	6.7	6.7	6.7							
July	moist	0.0	0.0	0.0	0.0	0.8	2.5	none	---	occasional	very brief	0.0	0.3	0.5
	wet	0.0	0.8	2.5	6.7	6.7	6.7							
August	moist	0.0	0.0	0.0	0.5	1.6	3.3	none	---	occasional	very brief	0.0	0.3	0.5
	wet	0.5	1.6	3.3	6.7	6.7	6.7							
September	moist	0.0	0.0	0.0	0.3	1.1	3.0	none	---	occasional	very brief	0.0	0.3	0.5
	wet	0.3	1.1	3.0	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	0.0	0.5	2.5	none	---	occasional	brief	0.0	0.3	0.5
	wet	0.0	0.5	2.5	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	0.0	0.3	1.6	none	---	occasional	long	0.0	0.3	0.5
	wet	0.0	0.3	1.6	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	0.5	0.8	2.5	none	---	occasional	long	0.0	0.3	0.5
	wet	0.5	0.8	2.5	6.7	6.7	6.7							

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I4A Berner, Rosewood, and Strathcona soils, seepy, 0 to 2 percent slopes

Berner (30 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	0.5	1.3	3.3	none	---	occasional	long	0.0	0.3	0.5
	wet	0.5	1.3	3.3	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	1.3	2.1	4.1	none	---	occasional	long	0.0	0.3	0.5
	wet	1.3	2.1	4.1	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	0.0	0.0	2.5	none	---	occasional	long	0.0	0.5	1.0
	wet	0.0	0.0	2.5	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	0.0	0.0	0.8	none	---	frequent	long	0.0	0.5	1.0
	wet	0.0	0.0	0.8	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	0.0	0.0	1.3	none	---	frequent	long	0.0	0.5	1.0
	wet	0.0	0.0	1.3	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	0.0	0.0	1.6	none	---	occasional	brief	0.0	0.5	1.0
	wet	0.0	0.0	1.6	6.7	6.7	6.7							
July	moist	0.0	0.0	0.0	0.2	0.8	2.5	none	---	rare	very brief	0.0	0.3	0.5
	wet	0.2	0.8	2.5	6.7	6.7	6.7							
August	moist	0.0	0.0	0.0	0.8	1.6	3.3	none	---	rare	very brief	0.0	0.3	0.5
	wet	0.8	1.6	3.3	6.7	6.7	6.7							
September	moist	0.0	0.0	0.0	0.3	1.1	3.0	none	---	rare	brief	0.0	0.3	0.5
	wet	0.3	1.1	3.0	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	0.2	0.5	2.5	none	---	occasional	brief	0.0	0.3	0.5
	wet	0.2	0.5	2.5	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	0.0	0.3	1.6	none	---	occasional	long	0.0	0.3	0.5
	wet	0.0	0.3	1.6	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	0.5	0.8	2.5	none	---	occasional	long	0.0	0.3	0.5
	wet	0.5	0.8	2.5	6.7	6.7	6.7							

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I4A (continued)

Rosewood, depressional (30 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.8-1.6-3.0	none	---	occasional	long	0.0-0.5-1.0
	wet	0.8-1.6-3.0	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.0-3.0-3.6	none	---	occasional	long	0.0-0.5-1.0
	wet	2.0-3.0-3.6	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.5-2.0	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.5-2.0	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-1.0	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.0	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.5-2.0	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.5-2.0	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.3-1.3-2.6	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.3-1.3-2.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.0-2.1-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.0-2.1-3.3	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.0-3.0-3.8	none	---	rare	very brief	0.0-0.3-0.5
	wet	2.0-3.0-3.8	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.0-2.1-3.3	none	---	rare	brief	0.0-0.3-0.5
	wet	1.0-2.1-3.3	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.7-1.6-2.6	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.7-1.6-2.6	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.3-1.3-2.0	none	---	occasional	long	0.0-0.5-1.0
	wet	0.3-1.3-2.0	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.7-1.6-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.7-1.6-2.5	6.7-6.7-6.7					

Strathcona, depressional (30 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.0-1.6-3.0	none	---	occasional	long	0.0-0.5-1.0
	wet	1.0-1.6-3.0	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.6-2.5-3.3	none	---	occasional	long	0.0-0.5-1.0
	wet	1.6-2.5-3.3	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.0	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-2.0	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-1.0	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.0	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-2.0	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-2.0	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.2-0.8-2.5	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.2-0.8-2.5	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.7-1.6-3.0	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.7-1.6-3.0	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	1.6-2.5-3.6	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.6-2.5-3.6	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.0-1.6-3.0	none	---	rare	brief	0.0-0.3-0.5
	wet	1.0-1.6-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.7-1.3-2.6	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.7-1.3-2.6	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.3-0.8-1.6	none	---	occasional	long	0.0-0.5-1.0
	wet	0.3-0.8-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.7-1.3-2.3	none	---	occasional	long	0.0-0.5-1.0
	wet	0.7-1.3-2.3	6.7-6.7-6.7					



Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I4A (continued)

Mavie (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Strathcona (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

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I5A Borup loam, 0 to 2 percent slopes

Borup (75 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	1.6	3.0	4.1	none	---	none	---	---	---	---
	wet	1.6	3.0	4.1	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	2.5	3.3	4.9	none	---	none	---	---	---	---
	wet	2.5	3.3	4.9	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	1.3	2.1	3.3	none	---	none	---	---	---	---
	wet	1.3	2.1	3.3	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	0.0	0.5	2.5	none	---	occasional	brief	0.0	0.3	0.5
	wet	0.0	0.5	2.5	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	0.3	0.8	3.3	none	---	occasional	brief	0.0	0.3	0.5
	wet	0.3	0.8	3.3	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	0.7	1.3	4.1	none	---	occasional	very brief	0.0	0.3	0.5
	wet	0.7	1.3	4.1	6.7	6.7	6.7							
July	moist	0.0	0.0	0.0	1.6	3.0	4.9	none	---	none	---	---	---	---
	wet	1.6	3.0	4.9	6.7	6.7	6.7							
August	moist	0.0	0.0	0.0	2.5	3.8	5.7	none	---	none	---	---	---	---
	wet	2.5	3.8	5.7	6.7	6.7	6.7							
September	moist	0.0	0.0	0.0	2.0	3.3	4.9	none	---	rare	very brief	0.0	0.1	0.3
	wet	2.0	3.3	4.9	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	1.3	1.6	4.1	none	---	rare	very brief	0.0	0.1	0.3
	wet	1.3	1.6	4.1	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	0.8	1.3	3.3	none	---	occasional	very brief	0.0	0.1	0.3
	wet	0.8	1.3	3.3	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	1.3	2.1	3.8	none	---	none	---	---	---	---
	wet	1.3	2.1	3.8	6.7	6.7	6.7							

Glyndon (9 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	2.5	4.1	6.7	none	---	none	---	---	---	---
	wet	2.5	4.1	6.7	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	3.3	4.9	6.7	none	---	none	---	---	---	---
	wet	3.3	4.9	6.7	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	2.5	3.9	5.7	none	---	none	---	---	---	---
	wet	2.5	3.9	5.7	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	0.7	1.0	3.3	none	---	none	---	---	---	---
	wet	0.7	1.0	3.3	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	1.0	1.6	4.1	none	---	none	---	---	---	---
	wet	1.0	1.6	4.1	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	1.6	2.5	4.9	none	---	none	---	---	---	---
	wet	1.6	2.5	4.9	6.7	6.7	6.7							
July	dry	0.0	0.0	0.0	0.0	0.0	0.2	none	---	none	---	---	---	---
	moist	0.0	0.0	0.2	2.5	3.9	6.7							
August	wet	2.5	3.9	6.7	6.7	6.7	6.7							
	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	---
September	moist	0.0	0.0	0.0	3.3	6.7	6.7							
	wet	3.3	6.7	6.7	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	2.0	4.1	5.7	none	---	none	---	---	---	---
	wet	2.0	4.1	5.7	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	1.6	3.0	4.1	none	---	none	---	---	---	---
	wet	1.6	3.0	4.1	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	2.0	3.8	4.9	none	---	none	---	---	---	---
	wet	2.0	3.8	4.9	6.7	6.7	6.7							

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I5A (continued)

Rosewood (8 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.0-2.5-4.9	none	---	none	---	---
	wet	2.0-2.5-4.9	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-5.7	none	---	none	---	---
	wet	2.5-3.3-5.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-1.3-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-1.3-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.9-5.7	none	---	none	---	---
	wet	2.5-4.9-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.3-3.0-4.9	none	---	none	---	---
	wet	1.3-3.0-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.0-2.1-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.0-2.1-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	none	---	---
	wet	1.3-2.1-4.1	6.7-6.7-6.7					

Augsburg (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.0-2.6-4.9	none	---	none	---	---
	wet	2.0-2.6-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.5-2.3-4.9	none	---	none	---	---
	wet	1.5-2.3-4.9	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	occasional	brief	0.0-0.3-0.5
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.0-3.9	none	---	none	---	---
	wet	1.3-2.0-3.9	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I5A (continued)

Augsburg, depressional (3 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	1.0	1.6	3.0	none	---	occasional	long	0.0	0.5	1.0
	wet	1.0	1.6	3.0	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	1.6	3.0	3.6	none	---	occasional	long	0.0	0.5	1.0
	wet	1.6	3.0	3.6	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	0.0	0.0	2.0	none	---	occasional	long	0.0	0.5	1.0
	wet	0.0	0.0	2.0	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	0.0	0.0	1.0	none	---	frequent	long	0.0	0.5	1.0
	wet	0.0	0.0	1.0	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	0.0	0.0	2.0	none	---	frequent	long	0.0	0.5	1.0
	wet	0.0	0.0	2.0	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	0.2	0.8	2.5	none	---	occasional	brief	0.0	0.5	1.0
	wet	0.2	0.8	2.5	6.7	6.7	6.7							
July	moist	0.0	0.0	0.0	0.7	1.6	3.3	none	---	rare	very brief	0.0	0.3	0.5
	wet	0.7	1.6	3.3	6.7	6.7	6.7							
August	moist	0.0	0.0	0.0	1.6	2.5	3.6	none	---	rare	very brief	0.0	0.3	0.5
	wet	1.6	2.5	3.6	6.7	6.7	6.7							
September	moist	0.0	0.0	0.0	1.0	1.6	3.0	none	---	occasional	brief	0.0	0.3	0.5
	wet	1.0	1.6	3.0	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	0.7	1.3	2.6	none	---	occasional	brief	0.0	0.3	0.5
	wet	0.7	1.3	2.6	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	0.3	0.8	1.6	none	---	occasional	long	0.0	0.5	1.0
	wet	0.3	0.8	1.6	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	0.7	1.3	2.3	none	---	occasional	long	0.0	0.5	1.0
	wet	0.7	1.3	2.3	6.7	6.7	6.7							

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I6A Borup very fine sandy loam, 0 to 2 percent slopes

Borup (75 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	1.6	3.0	4.1	none	---	none	---	---	---	---
	wet	1.6	3.0	4.1	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	2.5	3.3	4.9	none	---	none	---	---	---	---
	wet	2.5	3.3	4.9	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	1.3	2.1	3.3	none	---	none	---	---	---	---
	wet	1.3	2.1	3.3	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	0.0	0.5	2.5	none	---	occasional	brief	0.0	0.3	0.5
	wet	0.0	0.5	2.5	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	0.3	0.8	3.3	none	---	occasional	brief	0.0	0.3	0.5
	wet	0.3	0.8	3.3	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	0.7	1.3	4.1	none	---	occasional	very brief	0.0	0.3	0.5
	wet	0.7	1.3	4.1	6.7	6.7	6.7							
July	moist	0.0	0.0	0.0	1.6	3.0	4.9	none	---	none	---	---	---	---
	wet	1.6	3.0	4.9	6.7	6.7	6.7							
August	moist	0.0	0.0	0.0	2.5	3.8	5.7	none	---	none	---	---	---	---
	wet	2.5	3.8	5.7	6.7	6.7	6.7							
September	moist	0.0	0.0	0.0	2.0	3.3	4.9	none	---	rare	very brief	0.0	0.1	0.3
	wet	2.0	3.3	4.9	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	1.3	1.6	4.1	none	---	rare	very brief	0.0	0.1	0.3
	wet	1.3	1.6	4.1	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	0.8	1.3	3.3	none	---	occasional	very brief	0.0	0.1	0.3
	wet	0.8	1.3	3.3	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	1.3	2.1	3.8	none	---	none	---	---	---	---
	wet	1.3	2.1	3.8	6.7	6.7	6.7							

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I6A (continued)

Glyndon (9 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.5-4.1-6.7	none	---	none	---	---
	wet	2.5-4.1-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	3.3-4.9-6.7	none	---	none	---	---
	wet	3.3-4.9-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	2.5-3.9-5.7	none	---	none	---	---
	wet	2.5-3.9-5.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.7-1.0-3.3	none	---	none	---	---
	wet	0.7-1.0-3.3	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	1.0-1.6-4.1	none	---	none	---	---
	wet	1.0-1.6-4.1	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	1.6-2.5-4.9	none	---	none	---	---
	wet	1.6-2.5-4.9	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.2	none	---	none	---	---
	moist	0.0-0.0-0.2	2.5-3.9-6.7					
	wet	2.5-3.9-6.7	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	3.3-6.7-6.7					
	wet	3.3-6.7-6.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	2.5-4.6-6.2	none	---	none	---	---
	wet	2.5-4.6-6.2	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	2.0-4.1-5.7	none	---	none	---	---
	wet	2.0-4.1-5.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	2.0-3.8-4.9	none	---	none	---	---
	wet	2.0-3.8-4.9	6.7-6.7-6.7					

Rosewood (8 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.0-2.5-4.9	none	---	none	---	---
	wet	2.0-2.5-4.9	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-5.7	none	---	none	---	---
	wet	2.5-3.3-5.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-1.3-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-1.3-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.9-5.7	none	---	none	---	---
	wet	2.5-4.9-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.3-3.0-4.9	none	---	none	---	---
	wet	1.3-3.0-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.0-2.1-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.0-2.1-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	none	---	---
	wet	1.3-2.1-4.1	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I6A (continued)

Augsburg (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.0-2.6-4.9	none	---	none	---	---
	wet	2.0-2.6-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.5-2.3-4.9	none	---	none	---	---
	wet	1.5-2.3-4.9	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	occasional	brief	0.0-0.3-0.5
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.0-3.9	none	---	none	---	---
	wet	1.3-2.0-3.9	6.7-6.7-6.7					

Augsburg, depressional (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.0-1.6-3.0	none	---	occasional	long	0.0-0.5-1.0
	wet	1.0-1.6-3.0	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.6-3.0-3.6	none	---	occasional	long	0.0-0.5-1.0
	wet	1.6-3.0-3.6	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.0	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-2.0	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-1.0	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.0	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-2.0	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-2.0	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.2-0.8-2.5	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.2-0.8-2.5	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.7-1.6-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.7-1.6-3.3	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	1.6-2.5-3.6	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.6-2.5-3.6	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.0-1.6-3.0	none	---	occasional	brief	0.0-0.3-0.5
	wet	1.0-1.6-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.7-1.3-2.6	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.7-1.3-2.6	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.3-0.8-1.6	none	---	occasional	long	0.0-0.5-1.0
	wet	0.3-0.8-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.7-1.3-2.3	none	---	occasional	long	0.0-0.5-1.0
	wet	0.7-1.3-2.3	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

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I7A Bowstring-Fluvaquents complex, 0 to 2 percent slopes, frequently flooded

Bowstring (45 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.5-1.3-3.3	none	---	frequent	very long	0.0-0.3-0.5
	wet	0.5-1.3-3.3	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	frequent	very long	0.0-0.3-0.5
	wet	1.3-2.1-4.1	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.5	frequent	very long	frequent	very long	0.0-0.5-1.0
	wet	0.0-0.0-2.5	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	very frequent	very long	frequent	very long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	very frequent	long	frequent	very long	0.0-0.5-1.0
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.0-1.6	frequent	long	frequent	very long	0.0-0.5-1.0
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.2-0.8-2.5	frequent	brief	occasional	long	0.0-0.3-0.5
	wet	0.2-0.8-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.8-1.6-3.3	frequent	brief	occasional	long	0.0-0.3-0.5
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.3-1.1-3.0	frequent	brief	occasional	brief	0.0-0.3-0.5
	wet	0.3-1.1-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.2-0.5-2.5	frequent	long	occasional	brief	0.0-0.3-0.5
	wet	0.2-0.5-2.5	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.0-0.3-1.6	rare	long	occasional	long	0.0-0.3-0.5
	wet	0.0-0.3-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.5-0.8-2.5	none	---	frequent	very long	0.0-0.3-0.5
	wet	0.5-0.8-2.5	6.7-6.7-6.7					

Fluvaquents (45 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	frequent	very long	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	0.8-1.6-3.0	none	---	frequent	very long	0.0-0.5-1.0
	wet	0.8-1.6-3.0	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-1.6	frequent	very long	frequent	very long	0.0-0.5-1.0
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	very frequent	very long	frequent	very long	0.0-0.7-1.3
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	very frequent	long	frequent	very long	0.0-0.7-1.3
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.5-1.6	frequent	long	frequent	very long	0.0-0.5-1.0
	wet	0.0-0.5-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.5-1.3-2.5	frequent	brief	occasional	long	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.8-1.6-3.0	frequent	brief	occasional	brief	0.0-0.5-1.0
	wet	0.8-1.6-3.0	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.5-1.3-2.5	frequent	long	occasional	brief	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.3-0.8-2.0	frequent	long	occasional	long	0.0-0.5-1.0
	wet	0.3-0.8-2.0	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.2-0.5-1.6	rare	long	occasional	long	0.0-0.5-1.0
	wet	0.2-0.5-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.3-0.8-2.0	none	---	frequent	very long	0.0-0.5-1.0
	wet	0.3-0.8-2.0	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I7A (continued)

Hapludolls (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
February	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
March	moist	0.0-0.0-0.0	5.7-6.7-6.7	rare	brief	none	---	---
	wet	5.7-6.7-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	4.9-6.7-6.7	rare	brief	none	---	---
	wet	4.9-6.7-6.7	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	5.7-6.7-6.7	rare	brief	none	---	---
	wet	5.7-6.7-6.7	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	rare	very brief	none	---	---
	moist	0.0-0.0-0.3	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.5	very rare	very brief	none	---	---
	moist	0.0-0.0-0.5	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-0.5	very rare	very brief	none	---	---
	moist	0.0-0.0-0.5	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.5	rare	very brief	none	---	---
	moist	0.0-0.0-0.5	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	6.7-6.7-6.7	rare	brief	none	---	---
November	moist	0.0-0.0-0.0	6.7-6.7-6.7	rare	brief	none	---	---
	wet	5.7-6.7-6.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---

Water (5 percent of the map unit) (not applicable)

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I8A Cathro muck, 0 to 1 percent slopes

Cathro (80 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.5-1.3-3.3	none	---	occasional	long	0.0-0.3-0.5
	wet	0.5-1.3-3.3	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	occasional	long	0.0-0.3-0.5
	wet	1.3-2.1-4.1	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-2.5	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.0-1.6	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.2-0.8-2.5	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.2-0.8-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.3-1.1-3.0	none	---	rare	brief	0.0-0.3-0.5
	wet	0.3-1.1-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.2-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.2-0.5-2.5	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.0-0.3-1.6	none	---	occasional	long	0.0-0.3-0.5
	wet	0.0-0.3-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.5-0.8-2.5	none	---	occasional	long	0.0-0.3-0.5
	wet	0.5-0.8-2.5	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I8A (continued)

Hamre (8 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	occasional	long	0.0-0.5-1.0
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.6-2.5-4.1	none	---	occasional	long	0.0-0.5-1.0
	wet	1.6-2.5-4.1	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-2.5	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.5-1.6	none	---	frequent	brief	0.0-0.5-1.0
	wet	0.0-0.5-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.2-0.8-2.5	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.2-0.8-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.5-1.3-3.0	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-1.3-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.3-0.8-2.5	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.3-0.8-2.5	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.0-0.3-1.6	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.3-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					

Northwood (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	occasional	long	0.0-0.5-1.0
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.6-2.5-4.1	none	---	occasional	long	0.0-0.5-1.0
	wet	1.6-2.5-4.1	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-2.5	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.5-1.6	none	---	frequent	brief	0.0-0.5-1.0
	wet	0.0-0.5-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.2-0.8-2.5	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.2-0.8-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.5-1.3-3.0	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-1.3-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.3-0.8-2.5	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.3-0.8-2.5	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.0-0.3-1.6	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.3-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I8A (continued)

Roliss (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.3-2.1-3.3	none	---	none	---	---
	wet	1.3-2.1-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.3-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.3-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.7-1.3-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.7-1.3-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	2.0-3.3-4.9	none	---	rare	very brief	0.0-0.3-0.5
	wet	2.0-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.3-1.6-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Berner (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.5-1.3-3.3	none	---	occasional	long	0.0-0.3-0.5
	wet	0.5-1.3-3.3	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	occasional	long	0.0-0.3-0.5
	wet	1.3-2.1-4.1	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-2.5	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.0-1.6	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.2-0.8-2.5	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.2-0.8-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.3-1.1-3.0	none	---	rare	brief	0.0-0.3-0.5
	wet	0.3-1.1-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.2-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.2-0.5-2.5	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.0-0.3-1.6	none	---	occasional	long	0.0-0.3-0.5
	wet	0.0-0.3-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.5-0.8-2.5	none	---	occasional	long	0.0-0.3-0.5
	wet	0.5-0.8-2.5	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I8A (continued)

Kratka (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Seelyeville (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.5-1.0-3.3	none	---	occasional	long	0.0-0.3-0.5
	wet	0.5-1.0-3.3	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.3-1.6-4.1	none	---	occasional	long	0.0-0.3-0.5
	wet	1.3-1.6-4.1	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-2.5	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.3-1.6	none	---	frequent	brief	0.0-0.5-1.0
	wet	0.0-0.3-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.0-0.8-2.5	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.0-0.8-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.5-1.6-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-1.6-3.3	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.3-1.1-3.0	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.3-1.1-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.0-0.3-1.6	none	---	occasional	long	0.0-0.3-0.5
	wet	0.0-0.3-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.5-0.8-2.5	none	---	occasional	long	0.0-0.3-0.5
	wet	0.5-0.8-2.5	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

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I9A Clearwater clay, 0 to 2 percent slopes

Clearwater (80 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.8-2.1-4.1	none	---	none	---	---
	wet	0.8-2.1-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.6-2.5-4.9	none	---	none	---	---
	wet	1.6-2.5-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.3-1.3-3.3	none	---	none	---	---
	wet	0.3-1.3-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-1.6	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.3-2.1-4.1	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	occasional	very brief	0.0-0.2-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					

Clearwater, very cobbly (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.8-2.1-4.1	none	---	none	---	---
	wet	0.8-2.1-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.6-2.5-4.9	none	---	none	---	---
	wet	1.6-2.5-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.3-1.3-3.3	none	---	none	---	---
	wet	0.3-1.3-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-1.6	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.3-2.1-4.1	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	occasional	very brief	0.0-0.2-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I9A (continued)

Reis (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.0-2.6-4.9	none	---	none	---	---
	wet	2.0-2.6-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.8-2.0-3.9	none	---	none	---	---
	wet	0.8-2.0-3.9	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	none	---	---
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.3-0.8-3.0	none	---	none	---	---
	wet	0.3-0.8-3.0	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-3.6	none	---	none	---	---
	wet	0.8-1.6-3.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-2.8-4.6	none	---	none	---	---
	wet	1.6-2.8-4.6	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.6-5.4	none	---	none	---	---
	wet	2.5-3.6-5.4	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.1-4.6	none	---	none	---	---
	wet	1.6-3.1-4.6	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.1-2.0-4.1	none	---	none	---	---
	wet	1.1-2.0-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.7-1.6-3.3	none	---	none	---	---
	wet	0.7-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.1-2.0-3.8	none	---	none	---	---
	wet	1.1-2.0-3.8	6.7-6.7-6.7					

Clearwater, depressional (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	0.8-1.6-3.0	none	---	occasional	long	0.0-0.5-1.0
	wet	0.8-1.6-3.0	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-1.6	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.5-1.6	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.5-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.8-1.6-3.0	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.8-1.6-3.0	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.3-0.8-2.0	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.3-0.8-2.0	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.2-0.5-1.6	none	---	occasional	long	0.0-0.5-1.0
	wet	0.2-0.5-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.3-0.8-2.0	none	---	occasional	long	0.0-0.5-1.0
	wet	0.3-0.8-2.0	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I9A (continued)

Espelie (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.0-2.6-4.9	none	---	none	---	---
	wet	2.0-2.6-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.5-2.3-4.9	none	---	none	---	---
	wet	1.5-2.3-4.9	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.0-3.9	none	---	none	---	---
	wet	1.3-2.0-3.9	6.7-6.7-6.7					

Foxlake (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.8-2.1-4.1	none	---	none	---	---
	wet	0.8-2.1-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.6-2.5-4.9	none	---	none	---	---
	wet	1.6-2.5-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.3-1.3-3.3	none	---	none	---	---
	wet	0.3-1.3-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-1.6	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.3-2.1-4.1	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	occasional	very brief	0.0-0.2-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I9A (continued)

Hattie (1 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	4.1	5.7	6.7	none	---	none	---	---	---	---
	wet	4.1	5.7	6.7	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	4.9	6.7	6.7	none	---	none	---	---	---	---
	wet	4.9	6.7	6.7	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	4.1	5.7	6.7	none	---	none	---	---	---	---
	wet	4.1	5.7	6.7	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	1.3	2.1	4.1	none	---	none	---	---	---	---
	wet	1.3	2.1	4.1	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	1.6	2.5	4.1	none	---	none	---	---	---	---
	wet	1.6	2.5	4.1	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	2.0	3.0	5.7	none	---	none	---	---	---	---
	wet	2.0	3.0	5.7	6.7	6.7	6.7							
July	moist	0.0	0.0	0.0	2.5	4.1	6.7	none	---	none	---	---	---	---
	wet	2.5	4.1	6.7	6.7	6.7	6.7							
August	moist	0.0	0.0	0.0	3.3	4.9	6.7	none	---	none	---	---	---	---
	wet	3.3	4.9	6.7	6.7	6.7	6.7							
September	moist	0.0	0.0	0.0	3.3	4.6	6.7	none	---	none	---	---	---	---
	wet	3.3	4.6	6.7	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	2.5	4.1	5.7	none	---	none	---	---	---	---
	wet	2.5	4.1	5.7	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	3.3	4.6	6.7	none	---	none	---	---	---	---
	wet	3.3	4.6	6.7	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	3.6	4.9	6.7	none	---	none	---	---	---	---
	wet	3.6	4.9	6.7	6.7	6.7	6.7							

Huot (1 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	4.6	5.4	6.7	none	---	none	---	---	---	---
	wet	4.6	5.4	6.7	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	4.9	5.7	6.7	none	---	none	---	---	---	---
	wet	4.9	5.7	6.7	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	3.3	4.6	6.7	none	---	none	---	---	---	---
	wet	3.3	4.6	6.7	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	1.6	2.5	4.6	none	---	none	---	---	---	---
	wet	1.6	2.5	4.6	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	2.3	3.0	5.2	none	---	none	---	---	---	---
	wet	2.3	3.0	5.2	6.7	6.7	6.7							
June	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	---
	moist	0.0	0.0	0.3	2.8	3.8	6.2							
July	wet	2.8	3.8	6.2	6.7	6.7	6.7							
	dry	0.0	0.0	0.0	0.0	0.0	0.5	none	---	none	---	---	---	---
August	moist	0.0	0.0	0.5	3.8	4.6	6.7							
	wet	3.8	4.6	6.7	6.7	6.7	6.7							
September	dry	0.0	0.0	0.0	0.0	0.0	0.7	none	---	none	---	---	---	---
	moist	0.0	0.0	0.7	5.2	6.7	6.7							
October	wet	5.2	6.7	6.7	6.7	6.7	6.7							
	dry	0.0	0.0	0.0	0.0	0.0	0.5	none	---	none	---	---	---	---
November	moist	0.0	0.0	0.5	3.8	4.1	6.7							
	wet	3.8	4.1	6.7	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	3.3	3.8	6.7	none	---	none	---	---	---	---
	wet	3.3	3.8	6.7	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	2.5	3.3	4.9	none	---	none	---	---	---	---
	wet	2.5	3.3	4.9	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	3.8	4.1	5.7	none	---	none	---	---	---	---
	wet	3.8	4.1	5.7	6.7	6.7	6.7							

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

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I10A Clearwater mucky clay loam, depressional, 0 to 1 percent slopes

Clearwater, depressional (85 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	0.5	1.3	2.5	none	---	occasional	long	0.0	0.5	1.0
	wet	0.5	1.3	2.5	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	0.8	1.6	3.0	none	---	occasional	long	0.0	0.5	1.0
	wet	0.8	1.6	3.0	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	0.0	0.0	1.6	none	---	occasional	long	0.0	0.5	1.0
	wet	0.0	0.0	1.6	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	0.0	0.0	0.8	none	---	frequent	long	0.0	0.5	1.0
	wet	0.0	0.0	0.8	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	0.0	0.0	1.3	none	---	frequent	long	0.0	0.5	1.0
	wet	0.0	0.0	1.3	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	0.0	0.5	1.6	none	---	occasional	long	0.0	0.5	1.0
	wet	0.0	0.5	1.6	6.7	6.7	6.7							
July	moist	0.0	0.0	0.0	0.5	1.3	2.5	none	---	occasional	brief	0.0	0.5	1.0
	wet	0.5	1.3	2.5	6.7	6.7	6.7							
August	moist	0.0	0.0	0.0	0.8	1.6	3.0	none	---	occasional	brief	0.0	0.5	1.0
	wet	0.8	1.6	3.0	6.7	6.7	6.7							
September	moist	0.0	0.0	0.0	0.5	1.3	2.5	none	---	occasional	brief	0.0	0.5	1.0
	wet	0.5	1.3	2.5	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	0.3	0.8	2.0	none	---	occasional	brief	0.0	0.5	1.0
	wet	0.3	0.8	2.0	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	0.2	0.5	1.6	none	---	occasional	long	0.0	0.5	1.0
	wet	0.2	0.5	1.6	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	0.3	0.8	2.0	none	---	occasional	long	0.0	0.5	1.0
	wet	0.3	0.8	2.0	6.7	6.7	6.7							

Clearwater (9 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	0.8	2.1	4.1	none	---	none	---	---	---	---
	wet	0.8	2.1	4.1	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	1.6	2.5	4.9	none	---	none	---	---	---	---
	wet	1.6	2.5	4.9	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	0.3	1.3	3.3	none	---	none	---	---	---	---
	wet	0.3	1.3	3.3	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	0.0	0.0	1.6	none	---	occasional	brief	0.0	0.3	0.5
	wet	0.0	0.0	1.6	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	0.0	0.5	2.5	none	---	occasional	brief	0.0	0.3	0.5
	wet	0.0	0.5	2.5	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	0.8	1.3	3.3	none	---	occasional	very brief	0.0	0.3	0.5
	wet	0.8	1.3	3.3	6.7	6.7	6.7							
July	moist	0.0	0.0	0.0	1.3	2.1	4.1	none	---	rare	very brief	0.0	0.2	0.3
	wet	1.3	2.1	4.1	6.7	6.7	6.7							
August	moist	0.0	0.0	0.0	1.6	3.0	4.9	none	---	rare	very brief	0.0	0.2	0.3
	wet	1.6	3.0	4.9	6.7	6.7	6.7							
September	moist	0.0	0.0	0.0	1.3	2.5	4.1	none	---	rare	very brief	0.0	0.2	0.3
	wet	1.3	2.5	4.1	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	0.8	1.6	3.3	none	---	occasional	very brief	0.0	0.2	0.3
	wet	0.8	1.6	3.3	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	0.5	1.3	2.5	none	---	occasional	brief	0.0	0.3	0.5
	wet	0.5	1.3	2.5	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	0.8	1.6	3.3	none	---	none	---	---	---	---
	wet	0.8	1.6	3.3	6.7	6.7	6.7							

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I10A (continued)

Augsburg, depressional (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.0-1.6-3.0	none	---	occasional	long	0.0-0.5-1.0
	wet	1.0-1.6-3.0	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.6-3.0-3.6	none	---	occasional	long	0.0-0.5-1.0
	wet	1.6-3.0-3.6	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.0	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-2.0	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-1.0	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.0	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-2.0	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-2.0	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.2-0.8-2.5	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.2-0.8-2.5	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.7-1.6-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.7-1.6-3.3	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	1.6-2.5-3.6	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.6-2.5-3.6	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.0-1.6-3.0	none	---	occasional	brief	0.0-0.3-0.5
	wet	1.0-1.6-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.7-1.3-2.6	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.7-1.3-2.6	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.3-0.8-1.6	none	---	occasional	long	0.0-0.5-1.0
	wet	0.3-0.8-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.7-1.3-2.3	none	---	occasional	long	0.0-0.5-1.0
	wet	0.7-1.3-2.3	6.7-6.7-6.7					

Reis (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.0-2.6-4.9	none	---	none	---	---
	wet	2.0-2.6-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.8-2.0-3.9	none	---	none	---	---
	wet	0.8-2.0-3.9	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	none	---	---
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.3-0.8-3.0	none	---	none	---	---
	wet	0.3-0.8-3.0	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-3.6	none	---	none	---	---
	wet	0.8-1.6-3.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-2.8-4.6	none	---	none	---	---
	wet	1.6-2.8-4.6	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.6-5.4	none	---	none	---	---
	wet	2.5-3.6-5.4	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.1-4.6	none	---	none	---	---
	wet	1.6-3.1-4.6	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.1-2.0-4.1	none	---	none	---	---
	wet	1.1-2.0-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.7-1.6-3.3	none	---	none	---	---
	wet	0.7-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.1-2.0-3.8	none	---	none	---	---
	wet	1.1-2.0-3.8	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I10A (continued)

Espelie (1 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.0-2.6-4.9	none	---	none	---	---
	wet	2.0-2.6-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.5-2.3-4.9	none	---	none	---	---
	wet	1.5-2.3-4.9	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.0-3.9	none	---	none	---	---
	wet	1.3-2.0-3.9	6.7-6.7-6.7					

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I11A Deerwood muck, 0 to 1 percent slopes

Deerwood (85 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	occasional	long	0.0-0.5-1.0
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.6-2.5-4.1	none	---	occasional	long	0.0-0.5-1.0
	wet	1.6-2.5-4.1	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-2.5	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.5-1.6	none	---	frequent	brief	0.0-0.5-1.0
	wet	0.0-0.5-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.2-0.8-2.5	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.2-0.8-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.5-1.3-3.0	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-1.3-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.3-0.8-2.5	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.3-0.8-2.5	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.0-0.3-1.6	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.3-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

111A (continued)

Rosewood (6 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.0-2.5-4.9	none	---	none	---	---
	wet	2.0-2.5-4.9	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-5.7	none	---	none	---	---
	wet	2.5-3.3-5.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-1.3-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-1.3-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.9-5.7	none	---	none	---	---
	wet	2.5-4.9-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.3-3.0-4.9	none	---	none	---	---
	wet	1.3-3.0-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.0-2.1-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.0-2.1-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	none	---	---
	wet	1.3-2.1-4.1	6.7-6.7-6.7					

Markey (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.5-1.3-3.3	none	---	occasional	long	0.0-0.3-0.5
	wet	0.5-1.3-3.3	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	occasional	long	0.0-0.3-0.5
	wet	1.3-2.1-4.1	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-2.5	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.0-1.6	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.2-0.8-2.5	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.2-0.8-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.3-1.1-3.0	none	---	rare	brief	0.0-0.3-0.5
	wet	0.3-1.1-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.2-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.2-0.5-2.5	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.0-0.3-1.6	none	---	occasional	long	0.0-0.3-0.5
	wet	0.0-0.3-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.5-0.8-2.5	none	---	occasional	long	0.0-0.3-0.5
	wet	0.5-0.8-2.5	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

111A (continued)

Strathcona (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Syrene (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.0-3.0-4.9	none	---	none	---	---
	wet	2.0-3.0-4.9	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-5.7	none	---	none	---	---
	wet	2.5-3.3-5.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.5-4.1	none	---	none	---	---
	wet	1.6-2.5-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.3-2.5	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.0-0.3-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	1.0-1.6-2.5	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.0-1.6-2.5	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-2.5-4.9	none	---	none	---	---
	wet	1.6-2.5-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.3-5.7	none	---	none	---	---
	wet	2.5-3.3-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.3-2.5-4.9	none	---	none	---	---
	wet	1.3-2.5-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.0-2.1-4.1	none	---	none	---	---
	wet	1.0-2.1-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I11A (continued)

Venlo (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.8-1.6-3.0	none	---	occasional	long	0.0-0.5-1.0
	wet	0.8-1.6-3.0	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.0-3.0-3.6	none	---	occasional	long	0.0-0.5-1.0
	wet	2.0-3.0-3.6	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.5-2.0	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.5-2.0	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-1.0	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.0	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.5-2.0	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.5-2.0	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.3-1.3-2.6	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.3-1.3-2.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.0-2.1-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.0-2.1-3.3	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.0-3.0-3.8	none	---	rare	very brief	0.0-0.3-0.5
	wet	2.0-3.0-3.8	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.0-2.1-3.3	none	---	rare	brief	0.0-0.3-0.5
	wet	1.0-2.1-3.3	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.7-1.6-2.6	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.7-1.6-2.6	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.3-1.3-2.0	none	---	occasional	long	0.0-0.5-1.0
	wet	0.3-1.3-2.0	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.7-1.6-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.7-1.6-2.5	6.7-6.7-6.7					

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I12A Eckvoll loamy fine sand, 0 to 3 percent slopes

Eckvoll (70 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.6-5.4-6.7	none	---	none	---	---
	wet	4.6-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	4.9-5.7-6.7	none	---	none	---	---
	wet	4.9-5.7-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	2.1-2.5-4.6	none	---	none	---	---
	wet	2.1-2.5-4.6	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.6-3.1-5.2	none	---	none	---	---
	wet	2.6-3.1-5.2	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.6-3.8-6.2					
July	wet	2.6-3.8-6.2	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.5					
August	moist	0.0-0.0-0.5	3.8-4.9-6.7	none	---	none	---	---
	wet	3.8-4.9-6.7	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.8	none	---	none	---	---
	moist	0.0-0.0-0.8	5.2-6.7-6.7					
October	wet	5.2-6.7-6.7	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.3					
November	moist	0.0-0.0-0.3	3.8-4.1-6.7	none	---	none	---	---
	wet	3.8-4.1-6.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.3-3.8-6.7	none	---	none	---	---
	wet	3.3-3.8-6.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	2.5-3.3-5.6	none	---	none	---	---
	wet	2.5-3.3-5.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.8-4.1-6.2	none	---	none	---	---
	wet	3.8-4.1-6.2	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I12A (continued)

Kratka (8 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Smiley (7 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.3-2.1-3.3	none	---	none	---	---
	wet	1.3-2.1-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.3-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.3-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.7-1.3-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.7-1.3-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	2.0-3.3-4.9	none	---	rare	very brief	0.0-0.3-0.5
	wet	2.0-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.3-1.6-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I12A (continued)

Linveltdt (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.8-5.4-6.7	none	---	none	---	---
	wet	4.8-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	5.2-5.7-6.7	none	---	none	---	---
	wet	5.2-5.7-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.3-2.5-4.9	none	---	none	---	---
	wet	1.3-2.5-4.9	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.0-3.0-5.6	none	---	none	---	---
	wet	2.0-3.0-5.6	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	2.6-3.6-6.2					
	wet	2.6-3.6-6.2	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
	moist	0.0-0.0-0.7	3.9-5.4-6.7					
	wet	3.9-5.4-6.7	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-1.0	none	---	none	---	---
	moist	0.0-0.0-1.0	5.4-6.7-6.7					
	wet	5.4-6.7-6.7	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	4.1-4.6-6.7					
	wet	4.1-4.6-6.7	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	3.6-3.9-6.7	none	---	none	---	---
	wet	3.6-3.9-6.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.5-3.3-5.7	none	---	none	---	---
	wet	2.5-3.3-5.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.9-4.6-6.2	none	---	none	---	---
	wet	3.9-4.6-6.2	6.7-6.7-6.7					

Reiner (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.1-5.4-6.7	none	---	none	---	---
	wet	4.1-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	4.9-5.9-6.7	none	---	none	---	---
	wet	4.9-5.9-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.9-6.7	none	---	none	---	---
	wet	3.3-4.9-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.6-2.5-4.1	none	---	none	---	---
	wet	1.6-2.5-4.1	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.1-2.8-4.9	none	---	none	---	---
	wet	2.1-2.8-4.9	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	2.6-3.1-5.7	none	---	none	---	---
	wet	2.6-3.1-5.7	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	3.3-5.7-6.7					
	wet	3.3-5.7-6.7	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	4.9-6.7-6.7					
September	wet	4.9-6.7-6.7	6.7-6.7-6.7					
	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	3.6-4.9-6.7					
October	wet	3.6-4.9-6.7	6.7-6.7-6.7					
	moist	0.0-0.0-0.0	3.0-4.3-5.7	none	---	none	---	---
November	wet	3.0-4.3-5.7	6.7-6.7-6.7					
	moist	0.0-0.0-0.0	2.3-3.3-4.9	none	---	none	---	---
December	wet	2.3-3.3-4.9	6.7-6.7-6.7					
	moist	0.0-0.0-0.0	3.3-4.6-5.7	none	---	none	---	---
	wet	3.3-4.6-5.7	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I12A (continued)

Foldahl (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.6-5.4-6.7	none	---	none	---	---
	wet	4.6-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	4.9-5.7-6.7	none	---	none	---	---
	wet	4.9-5.7-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.3-2.5-4.6	none	---	none	---	---
	wet	1.3-2.5-4.6	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.0-3.1-5.2	none	---	none	---	---
	wet	2.0-3.1-5.2	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.6-3.8-6.2					
July	wet	2.6-3.8-6.2	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.5					
August	moist	0.0-0.0-0.5	3.8-4.9-6.7	none	---	none	---	---
	wet	3.8-4.9-6.7	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
	moist	0.0-0.0-0.7	5.2-6.7-6.7					
October	wet	5.2-6.7-6.7	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.3					
November	moist	0.0-0.0-0.3	3.8-4.1-6.7	none	---	none	---	---
	wet	3.8-4.1-6.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.3-3.8-6.7	none	---	none	---	---
	wet	3.3-3.8-6.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	2.5-3.3-5.6	none	---	none	---	---
	wet	2.5-3.3-5.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.8-4.1-6.2	none	---	none	---	---
	wet	3.8-4.1-6.2	6.7-6.7-6.7					

Pelan (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.8-5.4-6.7	none	---	none	---	---
	wet	4.8-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	5.2-5.7-6.7	none	---	none	---	---
	wet	5.2-5.7-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.3-2.5-4.9	none	---	none	---	---
	wet	1.3-2.5-4.9	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.0-3.0-5.6	none	---	none	---	---
	wet	2.0-3.0-5.6	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	2.6-3.6-6.2					
July	wet	2.6-3.6-6.2	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.7					
August	moist	0.0-0.0-0.7	3.9-5.4-6.7	none	---	none	---	---
	wet	3.9-5.4-6.7	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-1.0	none	---	none	---	---
	moist	0.0-0.0-1.0	5.4-6.7-6.7					
October	wet	5.4-6.7-6.7	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.3					
November	moist	0.0-0.0-0.3	4.1-4.6-6.7	none	---	none	---	---
	wet	4.1-4.6-6.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.6-3.9-6.7	none	---	none	---	---
	wet	3.6-3.9-6.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	2.5-3.3-5.7	none	---	none	---	---
	wet	2.5-3.3-5.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.9-4.6-6.2	none	---	none	---	---
	wet	3.9-4.6-6.2	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I12A (continued)

Poppleton (1 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.6-5.4-6.7	none	---	none	---	---
	wet	4.6-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	5.2-6.2-6.7	none	---	none	---	---
	wet	5.2-6.2-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.1-6.7	none	---	none	---	---
	wet	3.3-4.1-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	2.1-2.5-6.7	none	---	none	---	---
	wet	2.1-2.5-6.7	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.5-2.8-5.7	none	---	none	---	---
	wet	2.5-2.8-5.7	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.6-3.3-6.7					
July	wet	2.6-3.3-6.7	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.7					
August	moist	0.0-0.0-0.7	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-1.0					
September	moist	0.0-0.0-1.0	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.3					
October	moist	0.0-0.0-0.3	4.1-4.9-6.7	none	---	none	---	---
	wet	4.1-4.9-6.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	4.1-4.9-6.7	none	---	none	---	---
	wet	4.1-4.9-6.7	6.7-6.7-6.7					

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I13A Espelie fine sandy loam, 0 to 2 percent slopes

Espelie (75 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.0-2.6-4.9	none	---	none	---	---
	wet	2.0-2.6-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.5-2.3-4.9	none	---	none	---	---
	wet	1.5-2.3-4.9	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.0-3.9	none	---	none	---	---
	wet	1.3-2.0-3.9	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I13A (continued)

Foxlake (8 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.8-2.1-4.1	none	---	none	---	---
	wet	0.8-2.1-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.6-2.5-4.9	none	---	none	---	---
	wet	1.6-2.5-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.3-1.3-3.3	none	---	none	---	---
	wet	0.3-1.3-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-1.6	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.3-2.1-4.1	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	occasional	very brief	0.0-0.2-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					

Hilaire (7 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.6-5.4-6.7	none	---	none	---	---
	wet	4.6-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	4.9-5.7-6.7	none	---	none	---	---
	wet	4.9-5.7-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.6-2.5-4.6	none	---	none	---	---
	wet	1.6-2.5-4.6	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.3-3.0-5.2	none	---	none	---	---
	wet	2.3-3.0-5.2	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.8-3.8-6.2					
July	wet	2.8-3.8-6.2	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.5					
August	moist	0.0-0.0-0.5	3.8-4.6-6.7	none	---	none	---	---
	wet	3.8-4.6-6.7	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
	moist	0.0-0.0-0.7	5.2-6.7-6.7					
October	wet	5.2-6.7-6.7	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.5					
November	moist	0.0-0.0-0.5	3.8-4.1-6.7	none	---	none	---	---
	wet	3.8-4.1-6.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.3-3.8-6.7	none	---	none	---	---
	wet	3.3-3.8-6.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.8-4.1-5.7	none	---	none	---	---
	wet	3.8-4.1-5.7	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I13A (continued)

Clearwater, depressional (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	0.8-1.6-3.0	none	---	occasional	long	0.0-0.5-1.0
	wet	0.8-1.6-3.0	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-1.6	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.5-1.6	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.5-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.8-1.6-3.0	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.8-1.6-3.0	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.3-0.8-2.0	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.3-0.8-2.0	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.2-0.5-1.6	none	---	occasional	long	0.0-0.5-1.0
	wet	0.2-0.5-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.3-0.8-2.0	none	---	occasional	long	0.0-0.5-1.0
	wet	0.3-0.8-2.0	6.7-6.7-6.7					

Thiefriever (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.0-2.6-4.9	none	---	none	---	---
	wet	2.0-2.6-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.5-2.3-4.9	none	---	none	---	---
	wet	1.5-2.3-4.9	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.0-3.9	none	---	none	---	---
	wet	1.3-2.0-3.9	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

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I14B Fairdale silt loam, 1 to 6 percent slopes, occasionally flooded

Fairdale (85 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.1-5.4-6.7	none	---	none	---	---
	wet	4.1-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	4.9-5.9-6.7	none	---	none	---	---
	wet	4.9-5.9-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.9-6.7	occasional	brief	none	---	---
	wet	3.3-4.9-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.6-2.5-4.1	occasional	brief	none	---	---
	wet	1.6-2.5-4.1	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.1-2.8-4.9	occasional	brief	none	---	---
	wet	2.1-2.8-4.9	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	occasional	brief	none	---	---
	moist	0.0-0.0-0.3	2.6-3.1-5.7					
July	wet	2.6-3.1-5.7	6.7-6.7-6.7	rare	very brief	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.5					
August	moist	0.0-0.0-0.5	3.3-5.7-6.7	very rare	very brief	none	---	---
	wet	3.3-5.7-6.7	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.7	very rare	very brief	none	---	---
	moist	0.0-0.0-0.7	4.9-6.7-6.7					
October	wet	4.9-6.7-6.7	6.7-6.7-6.7	very rare	very brief	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.3					
November	moist	0.0-0.0-0.3	3.6-4.9-6.7	none	---	none	---	---
	wet	3.6-4.9-6.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.0-4.3-5.7	very rare	very brief	none	---	---
	wet	3.0-4.3-5.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	2.3-3.3-4.9	none	---	none	---	---
	wet	2.3-3.3-4.9	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.3-4.6-5.7	none	---	none	---	---
	wet	3.3-4.6-5.7	6.7-6.7-6.7					

Fluvaquents (6 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	frequent	very long	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	0.8-1.6-3.0	none	---	frequent	very long	0.0-0.5-1.0
	wet	0.8-1.6-3.0	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-1.6	frequent	very long	frequent	very long	0.0-0.5-1.0
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	very frequent	very long	frequent	very long	0.0-0.7-1.3
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	very frequent	long	frequent	very long	0.0-0.7-1.3
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.5-1.6	frequent	long	frequent	very long	0.0-0.5-1.0
	wet	0.0-0.5-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.5-1.3-2.5	frequent	brief	occasional	long	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.8-1.6-3.0	frequent	brief	occasional	brief	0.0-0.5-1.0
	wet	0.8-1.6-3.0	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.5-1.3-2.5	frequent	long	occasional	brief	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.3-0.8-2.0	frequent	long	occasional	long	0.0-0.5-1.0
	wet	0.3-0.8-2.0	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.2-0.5-1.6	rare	long	occasional	long	0.0-0.5-1.0
	wet	0.2-0.5-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.3-0.8-2.0	none	---	frequent	very long	0.0-0.5-1.0
	wet	0.3-0.8-2.0	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I14B (continued)

Hapludolls (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
February	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
March	moist	0.0-0.0-0.0	5.7-6.7-6.7	rare	brief	none	---	---
	wet	5.7-6.7-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	4.9-6.7-6.7	rare	brief	none	---	---
	wet	4.9-6.7-6.7	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	5.7-6.7-6.7	rare	brief	none	---	---
	wet	5.7-6.7-6.7	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	rare	very brief	none	---	---
	moist	0.0-0.0-0.3	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.5	very rare	very brief	none	---	---
	moist	0.0-0.0-0.5	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-0.5	very rare	very brief	none	---	---
	moist	0.0-0.0-0.5	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.5	rare	very brief	none	---	---
	moist	0.0-0.0-0.5	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	6.7-6.7-6.7	rare	brief	none	---	---
November	moist	0.0-0.0-0.0	6.7-6.7-6.7	rare	brief	none	---	---
	wet	5.7-6.7-6.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---

Hapludalfs (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.1-5.4-6.7	none	---	none	---	---
	wet	4.1-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	4.9-6.2-6.7	none	---	none	---	---
	wet	4.9-6.2-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	4.1-5.4-6.7	rare	brief	none	---	---
	wet	4.1-5.4-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	2.1-2.5-3.8	rare	brief	none	---	---
	wet	2.1-2.5-3.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.5-2.8-4.6	rare	brief	none	---	---
	wet	2.5-2.8-4.6	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	2.8-3.1-5.7	rare	very brief	none	---	---
	wet	2.8-3.1-5.7	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.2	very rare	very brief	none	---	---
	moist	0.0-0.0-0.2	3.3-5.7-6.7					
	wet	3.3-5.7-6.7	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-0.3	very rare	very brief	none	---	---
	moist	0.0-0.0-0.3	4.9-6.7-6.7					
September	wet	4.9-6.7-6.7	6.7-6.7-6.7					
	moist	0.0-0.0-0.0	3.6-4.9-6.7	rare	very brief	none	---	---
October	wet	3.6-4.9-6.7	6.7-6.7-6.7					
	moist	0.0-0.0-0.0	3.0-4.6-6.7	rare	very brief	none	---	---
November	wet	3.0-4.6-6.7	6.7-6.7-6.7					
	moist	0.0-0.0-0.0	2.3-3.3-4.9	rare	very brief	none	---	---
December	wet	2.3-3.3-4.9	6.7-6.7-6.7					
	moist	0.0-0.0-0.0	3.3-4.1-5.7	none	---	none	---	---
	wet	3.3-4.1-5.7	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I14B (continued)

Zell (2 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	6.7	6.7	6.7	none	---	none	---	---	---	
February	moist	0.0	0.0	0.0	6.7	6.7	6.7	none	---	none	---	---	---	
March	moist	0.0	0.0	0.0	6.7	6.7	6.7	none	---	none	---	---	---	
April	moist	0.0	0.0	0.0	6.7	6.7	6.7	none	---	none	---	---	---	
May	moist	0.0	0.0	0.0	6.7	6.7	6.7	none	---	none	---	---	---	
June	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	
	moist	0.0	0.0	0.3	6.7	6.7	6.7							
July	dry	0.0	0.0	0.0	0.0	0.0	0.7	none	---	none	---	---	---	
	moist	0.0	0.0	0.7	6.7	6.7	6.7							
August	dry	0.0	0.0	0.0	0.0	0.0	1.0	none	---	none	---	---	---	
	moist	0.0	0.0	1.0	6.7	6.7	6.7							
September	dry	0.0	0.0	0.0	0.0	0.0	1.0	none	---	none	---	---	---	
	moist	0.0	0.0	1.0	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	6.7	6.7	6.7	none	---	none	---	---	---	
November	moist	0.0	0.0	0.0	6.7	6.7	6.7	none	---	none	---	---	---	
December	moist	0.0	0.0	0.0	6.7	6.7	6.7	none	---	none	---	---	---	

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I14D Fairdale silt loam, 6 to 15 percent slopes, occasionally flooded

Fairdale (85 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	4.6	5.7	6.7	none	---	none	---	---	---	
	wet	4.6	5.7	6.7	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	4.6	6.2	6.7	none	---	none	---	---	---	
	wet	4.6	6.2	6.7	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	3.8	5.2	6.7	occasional	brief	none	---	---	---	
	wet	3.3	4.9	6.7	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	1.6	2.5	4.1	occasional	brief	none	---	---	---	
	wet	1.6	2.5	4.1	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	2.1	3.1	4.9	occasional	brief	none	---	---	---	
	wet	2.1	3.1	4.9	6.7	6.7	6.7							
June	dry	0.0	0.0	0.0	0.0	0.0	0.3	occasional	brief	none	---	---	---	
	moist	0.0	0.0	0.3	3.0	3.8	6.7							
	wet	3.0	3.8	6.7	6.7	6.7	6.7							
July	dry	0.0	0.0	0.0	0.0	0.0	0.8	rare	very brief	none	---	---	---	
	moist	0.0	0.0	0.8	4.1	6.2	6.7							
	wet	4.1	6.2	6.7	6.7	6.7	6.7							
August	dry	0.0	0.0	0.0	0.0	0.0	0.8	very rare	very brief	none	---	---	---	
	moist	0.0	0.0	0.8	5.4	6.7	6.7							
	wet	5.4	6.7	6.7	6.7	6.7	6.7							
September	dry	0.0	0.0	0.0	0.0	0.0	0.3	very rare	very brief	none	---	---	---	
	moist	0.0	0.0	0.3	4.1	5.4	6.7							
	wet	4.1	5.4	6.7	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	3.3	4.8	6.7	very rare	very brief	none	---	---	---	
	wet	3.3	4.8	6.7	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	2.5	3.8	5.7	none	---	none	---	---	---	
	wet	2.5	3.8	5.7	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	4.1	5.2	6.7	none	---	none	---	---	---	
	wet	4.1	5.2	6.7	6.7	6.7	6.7							

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I14D (continued)

Fluvaquents (6 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	frequent	very long	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	0.8-1.6-3.0	none	---	frequent	very long	0.0-0.5-1.0
	wet	0.8-1.6-3.0	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-1.6	frequent	very long	frequent	very long	0.0-0.5-1.0
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	very frequent	very long	frequent	very long	0.0-0.7-1.3
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	very frequent	long	frequent	very long	0.0-0.7-1.3
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.5-1.6	frequent	long	frequent	very long	0.0-0.5-1.0
	wet	0.0-0.5-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.5-1.3-2.5	frequent	brief	occasional	long	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.8-1.6-3.0	frequent	brief	occasional	brief	0.0-0.5-1.0
	wet	0.8-1.6-3.0	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.5-1.3-2.5	frequent	long	occasional	brief	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.3-0.8-2.0	frequent	long	occasional	long	0.0-0.5-1.0
	wet	0.3-0.8-2.0	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.2-0.5-1.6	rare	long	occasional	long	0.0-0.5-1.0
	wet	0.2-0.5-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.3-0.8-2.0	none	---	frequent	very long	0.0-0.5-1.0
	wet	0.3-0.8-2.0	6.7-6.7-6.7					

Hapludolls (4 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
February	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
March	moist	0.0-0.0-0.0	5.7-6.7-6.7	rare	brief	none	---	---
	wet	5.7-6.7-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	4.9-6.7-6.7	rare	brief	none	---	---
	wet	4.9-6.7-6.7	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	5.7-6.7-6.7	rare	brief	none	---	---
	wet	5.7-6.7-6.7	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	rare	very brief	none	---	---
	moist	0.0-0.0-0.3	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.5	very rare	very brief	none	---	---
	moist	0.0-0.0-0.5	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-0.5	very rare	very brief	none	---	---
	moist	0.0-0.0-0.5	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.5	rare	very brief	none	---	---
	moist	0.0-0.0-0.5	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	6.7-6.7-6.7	rare	brief	none	---	---
November	moist	0.0-0.0-0.0	6.7-6.7-6.7	rare	brief	none	---	---
	wet	5.7-6.7-6.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I14D (continued)

Zell (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
February	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
March	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
April	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
May	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
	moist	0.0-0.0-0.7	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-1.0	none	---	none	---	---
	moist	0.0-0.0-1.0	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-1.0	none	---	none	---	---
	moist	0.0-0.0-1.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
November	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
December	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---

Hapludalfs (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.1-5.4-6.7	none	---	none	---	---
	wet	4.1-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	4.9-6.2-6.7	none	---	none	---	---
	wet	4.9-6.2-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	4.1-5.4-6.7	rare	brief	none	---	---
	wet	4.1-5.4-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	2.1-2.5-3.8	rare	brief	none	---	---
	wet	2.1-2.5-3.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.5-2.8-4.6	rare	brief	none	---	---
	wet	2.5-2.8-4.6	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	2.8-3.1-5.7	rare	very brief	none	---	---
	wet	2.8-3.1-5.7	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.2	very rare	very brief	none	---	---
	moist	0.0-0.0-0.2	3.3-5.7-6.7					
	wet	3.3-5.7-6.7	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-0.3	very rare	very brief	none	---	---
	moist	0.0-0.0-0.3	4.9-6.7-6.7					
	wet	4.9-6.7-6.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	3.6-4.9-6.7	rare	very brief	none	---	---
	wet	3.6-4.9-6.7	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	3.0-4.6-6.7	rare	very brief	none	---	---
	wet	3.0-4.6-6.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.3-3.3-4.9	rare	very brief	none	---	---
	wet	2.3-3.3-4.9	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.3-4.1-5.7	none	---	none	---	---
	wet	3.3-4.1-5.7	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

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I15A Flaming loamy fine sand, 0 to 3 percent slopes

Flaming (70 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	4.6	5.4	6.7	none	---	none	---	---	---	---
	wet	4.6	5.4	6.7	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	5.2	6.2	6.7	none	---	none	---	---	---	---
	wet	5.2	6.2	6.7	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	3.3	4.1	6.7	none	---	none	---	---	---	---
	wet	3.3	4.1	6.7	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	2.1	2.5	6.7	none	---	none	---	---	---	---
	wet	2.1	2.5	6.7	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	2.5	2.8	5.7	none	---	none	---	---	---	---
	wet	2.5	2.8	5.7	6.7	6.7	6.7							
June	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	---
	moist	0.0	0.0	0.3	2.6	3.3	6.7							
July	wet	2.6	3.3	6.7	6.7	6.7	6.7							
	dry	0.0	0.0	0.0	0.0	0.0	0.7	none	---	none	---	---	---	---
August	moist	0.0	0.0	0.7	6.7	6.7	6.7							
	dry	0.0	0.0	0.0	0.0	0.0	1.0	none	---	none	---	---	---	---
September	moist	0.0	0.0	1.0	6.7	6.7	6.7							
	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	---
October	moist	0.0	0.0	0.3	4.1	4.9	6.7							
	wet	4.1	4.9	6.7	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	3.3	4.6	6.7	none	---	none	---	---	---	---
	wet	3.3	4.6	6.7	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	2.5	4.1	5.7	none	---	none	---	---	---	---
	wet	2.5	4.1	5.7	6.7	6.7	6.7							

Garborg (10 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	2.6	3.3	5.9	none	---	none	---	---	---	---
	wet	2.6	3.3	5.9	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	3.3	4.1	6.7	none	---	none	---	---	---	---
	wet	3.3	4.1	6.7	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	2.6	3.3	5.7	none	---	none	---	---	---	---
	wet	2.6	3.3	5.7	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	1.1	1.5	3.3	none	---	none	---	---	---	---
	wet	1.1	1.5	3.3	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	1.5	1.8	4.1	none	---	none	---	---	---	---
	wet	1.5	1.8	4.1	6.7	6.7	6.7							
June	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	---
	moist	0.0	0.0	0.3	2.0	2.5	4.9							
July	wet	2.0	2.5	4.9	6.7	6.7	6.7							
	dry	0.0	0.0	0.0	0.0	0.0	0.5	none	---	none	---	---	---	---
August	moist	0.0	0.0	0.5	2.6	4.9	6.2							
	wet	2.6	4.9	6.2	6.7	6.7	6.7							
September	dry	0.0	0.0	0.0	0.0	0.0	0.7	none	---	none	---	---	---	---
	moist	0.0	0.0	0.7	6.7	6.7	6.7							
October	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	---
	moist	0.0	0.0	0.3	2.6	4.9	6.7							
November	wet	2.6	4.9	6.7	6.7	6.7	6.7							
	moist	0.0	0.0	0.0	2.3	3.0	5.7	none	---	none	---	---	---	---
December	wet	2.3	3.0	5.7	6.7	6.7	6.7							
	moist	0.0	0.0	0.0	2.0	2.5	4.9	none	---	none	---	---	---	---
December	wet	2.0	2.5	4.9	6.7	6.7	6.7							
	moist	0.0	0.0	0.0	2.3	3.0	5.2	none	---	none	---	---	---	---
December	wet	2.3	3.0	5.2	6.7	6.7	6.7							

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I15A (continued)

Hamar (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.0-2.5-4.9	none	---	none	---	---
	wet	2.0-2.5-4.9	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-5.7	none	---	none	---	---
	wet	2.5-3.3-5.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-1.3-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-1.3-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.9-5.7	none	---	none	---	---
	wet	2.5-4.9-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.3-3.0-4.9	none	---	none	---	---
	wet	1.3-3.0-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.0-2.1-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.0-2.1-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	none	---	---
	wet	1.3-2.1-4.1	6.7-6.7-6.7					

Ulen (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.6-3.3-5.9	none	---	none	---	---
	wet	2.6-3.3-5.9	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	3.3-4.1-6.7	none	---	none	---	---
	wet	3.3-4.1-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	2.6-3.3-5.7	none	---	none	---	---
	wet	2.6-3.3-5.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.5-2.0-3.3	none	---	none	---	---
	wet	1.5-2.0-3.3	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.0-2.5-4.1	none	---	none	---	---
	wet	2.0-2.5-4.1	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.5-3.0-4.9					
July	wet	2.5-3.0-4.9	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.5					
August	moist	0.0-0.0-0.5	3.0-4.9-6.2	none	---	none	---	---
	wet	3.0-4.9-6.2	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
	moist	0.0-0.0-0.7	6.7-6.7-6.7					
October	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.6-4.9-6.7					
November	wet	2.6-4.9-6.7	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.0	2.3-3.0-5.7					
December	wet	2.3-3.0-5.7	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.0	2.0-2.5-4.9					
December	wet	2.0-2.5-4.9	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.0	2.3-3.0-5.2					
December	wet	2.3-3.0-5.2	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.0	2.3-3.0-5.2					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I15A (continued)

Poppleton (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.6-5.4-6.7	none	---	none	---	---
	wet	4.6-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	5.2-6.2-6.7	none	---	none	---	---
	wet	5.2-6.2-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.1-6.7	none	---	none	---	---
	wet	3.3-4.1-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	2.1-2.5-6.7	none	---	none	---	---
	wet	2.1-2.5-6.7	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.5-2.8-5.7	none	---	none	---	---
	wet	2.5-2.8-5.7	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.6-3.3-6.7					
	wet	2.6-3.3-6.7	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
	moist	0.0-0.0-0.7	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-1.0	none	---	none	---	---
	moist	0.0-0.0-1.0	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	4.1-4.9-6.7					
October	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	4.1-4.9-6.7	none	---	none	---	---
	wet	4.1-4.9-6.7	6.7-6.7-6.7					

Sandberg (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
February	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
March	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
April	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
May	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
	moist	0.0-0.0-0.7	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-1.0	none	---	none	---	---
	moist	0.0-0.0-1.0	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-1.0	none	---	none	---	---
	moist	0.0-0.0-1.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
November	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
December	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---



Table 25.--Soil Moisture, Ponding, and Flooding--Continued

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I16F Fluvaquents, frequently flooded-Hapludolls complex, 0 to 30 percent slopes

Fluvaquents (55 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	frequent	very long	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	0.8-1.6-3.0	none	---	frequent	very long	0.0-0.5-1.0
	wet	0.8-1.6-3.0	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-1.6	frequent	very long	frequent	very long	0.0-0.5-1.0
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	very frequent	very long	frequent	very long	0.0-0.7-1.3
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	very frequent	long	frequent	very long	0.0-0.7-1.3
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.5-1.6	frequent	long	frequent	very long	0.0-0.5-1.0
	wet	0.0-0.5-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.5-1.3-2.5	frequent	brief	occasional	long	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.8-1.6-3.0	frequent	brief	occasional	brief	0.0-0.5-1.0
	wet	0.8-1.6-3.0	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.5-1.3-2.5	frequent	long	occasional	brief	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.3-0.8-2.0	frequent	long	occasional	long	0.0-0.5-1.0
	wet	0.3-0.8-2.0	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.2-0.5-1.6	rare	long	occasional	long	0.0-0.5-1.0
	wet	0.2-0.5-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.3-0.8-2.0	none	---	frequent	very long	0.0-0.5-1.0
	wet	0.3-0.8-2.0	6.7-6.7-6.7					

Hapludolls (25 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
February	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
March	moist	0.0-0.0-0.0	5.7-6.7-6.7	rare	brief	none	---	---
	wet	5.7-6.7-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	4.9-6.7-6.7	rare	brief	none	---	---
	wet	4.9-6.7-6.7	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	5.7-6.7-6.7	rare	brief	none	---	---
	wet	5.7-6.7-6.7	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	rare	very brief	none	---	---
	moist	0.0-0.0-0.3	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.5	very rare	very brief	none	---	---
	moist	0.0-0.0-0.5	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-0.5	very rare	very brief	none	---	---
	moist	0.0-0.0-0.5	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.5	rare	very brief	none	---	---
	moist	0.0-0.0-0.5	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	6.7-6.7-6.7	rare	brief	none	---	---
November	moist	0.0-0.0-0.0	6.7-6.7-6.7	rare	brief	none	---	---
	wet	5.7-6.7-6.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I16F (continued)

Hapludalfs (7 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.1-5.4-6.7	none	---	none	---	---
	wet	4.1-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	4.9-6.2-6.7	none	---	none	---	---
	wet	4.9-6.2-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	4.1-5.4-6.7	rare	brief	none	---	---
	wet	4.1-5.4-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	2.1-2.5-3.8	rare	brief	none	---	---
	wet	2.1-2.5-3.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.5-2.8-4.6	rare	brief	none	---	---
	wet	2.5-2.8-4.6	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	2.8-3.1-5.7	rare	very brief	none	---	---
	wet	2.8-3.1-5.7	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.2	very rare	very brief	none	---	---
	moist	0.0-0.0-0.2	3.3-5.7-6.7					
August	wet	3.3-5.7-6.7	6.7-6.7-6.7	very rare	very brief	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.3					
September	moist	0.0-0.0-0.3	4.9-6.7-6.7	rare	very brief	none	---	---
	wet	4.9-6.7-6.7	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	3.6-4.9-6.7	rare	very brief	none	---	---
	wet	3.6-4.9-6.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	3.0-4.6-6.7	rare	very brief	none	---	---
	wet	3.0-4.6-6.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	2.3-3.3-4.9	rare	very brief	none	---	---
	wet	2.3-3.3-4.9	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.3-4.1-5.7	none	---	none	---	---
	wet	3.3-4.1-5.7	6.7-6.7-6.7					

Fairdale (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.6-5.7-6.7	none	---	none	---	---
	wet	4.6-5.7-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	4.6-6.2-6.7	none	---	none	---	---
	wet	4.6-6.2-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.8-5.2-6.7	occasional	brief	none	---	---
	wet	3.3-4.9-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.6-2.5-4.1	occasional	brief	none	---	---
	wet	1.6-2.5-4.1	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.1-3.1-4.9	occasional	brief	none	---	---
	wet	2.1-3.1-4.9	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	occasional	brief	none	---	---
	moist	0.0-0.0-0.3	3.0-3.8-6.7					
July	wet	3.0-3.8-6.7	6.7-6.7-6.7	rare	very brief	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.8					
August	moist	0.0-0.0-0.8	4.1-6.2-6.7	very rare	very brief	none	---	---
	wet	4.1-6.2-6.7	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.8	very rare	very brief	none	---	---
	moist	0.0-0.0-0.0	0.0-0.0-0.3					
October	wet	0.0-0.0-0.3	4.1-5.4-6.7	very rare	very brief	none	---	---
	moist	4.1-5.4-6.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	3.3-4.8-6.7	none	---	none	---	---
	wet	3.3-4.8-6.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	4.1-5.2-6.7	none	---	none	---	---
	wet	4.1-5.2-6.7	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I16F (continued)

Water (5 percent of the map unit) (not applicable)

Bowstring (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.5-1.3-3.3	none	---	frequent	very long	0.0-0.3-0.5
	wet	0.5-1.3-3.3	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	frequent	very long	0.0-0.3-0.5
	wet	1.3-2.1-4.1	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.5	frequent	very long	frequent	very long	0.0-0.5-1.0
	wet	0.0-0.0-2.5	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	very frequent	very long	frequent	very long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	very frequent	long	frequent	very long	0.0-0.5-1.0
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.0-1.6	frequent	long	frequent	very long	0.0-0.5-1.0
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.2-0.8-2.5	frequent	brief	occasional	long	0.0-0.3-0.5
	wet	0.2-0.8-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.8-1.6-3.3	frequent	brief	occasional	long	0.0-0.3-0.5
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.3-1.1-3.0	frequent	brief	occasional	brief	0.0-0.3-0.5
	wet	0.3-1.1-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.2-0.5-2.5	frequent	long	occasional	brief	0.0-0.3-0.5
	wet	0.2-0.5-2.5	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.0-0.3-1.6	rare	long	occasional	long	0.0-0.3-0.5
	moist	0.0-0.0-0.0	0.2-0.5-1.6					
	wet	0.0-0.3-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.5-0.8-2.5	none	---	frequent	very long	0.0-0.3-0.5
	wet	0.5-0.8-2.5	6.7-6.7-6.7					

Rauville (1 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	frequent	very long	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	0.8-1.6-3.0	none	---	frequent	very long	0.0-0.5-1.0
	wet	0.8-1.6-3.0	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-1.6	frequent	very long	frequent	very long	0.0-0.5-1.0
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	very frequent	very long	frequent	very long	0.0-0.7-1.3
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	very frequent	long	frequent	very long	0.0-0.7-1.3
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.5-1.6	frequent	long	frequent	very long	0.0-0.5-1.0
	wet	0.0-0.5-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.5-1.3-2.5	frequent	brief	occasional	long	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.8-1.6-3.0	frequent	brief	occasional	brief	0.0-0.5-1.0
	wet	0.8-1.6-3.0	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.5-1.3-2.5	frequent	long	occasional	brief	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.3-0.8-2.0	frequent	long	occasional	long	0.0-0.5-1.0
	wet	0.3-0.8-2.0	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.2-0.5-1.6	rare	long	occasional	long	0.0-0.5-1.0
	wet	0.2-0.5-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.3-0.8-2.0	none	---	frequent	very long	0.0-0.5-1.0
	wet	0.3-0.8-2.0	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

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I17A Foldahl fine sandy loam, 0 to 3 percent slopes

Foldahl (75 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	4.6	5.4	6.7	none	---	none	---	---	---	
	wet	4.6	5.4	6.7	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	4.9	5.7	6.7	none	---	none	---	---	---	
	wet	4.9	5.7	6.7	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	3.3	4.6	6.7	none	---	none	---	---	---	
	wet	3.3	4.6	6.7	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	1.3	2.5	4.6	none	---	none	---	---	---	
	wet	1.3	2.5	4.6	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	2.0	3.1	5.2	none	---	none	---	---	---	
	wet	2.0	3.1	5.2	6.7	6.7	6.7							
June	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	
	moist	0.0	0.0	0.3	2.6	3.8	6.2							
July	wet	2.6	3.8	6.2	6.7	6.7	6.7							
	dry	0.0	0.0	0.0	0.0	0.0	0.5	none	---	none	---	---	---	
August	moist	0.0	0.0	0.5	3.8	4.9	6.7							
	wet	3.8	4.9	6.7	6.7	6.7	6.7							
September	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	
	moist	0.0	0.0	0.3	3.8	4.1	6.7							
October	wet	3.8	4.1	6.7	6.7	6.7	6.7							
	moist	0.0	0.0	0.0	3.3	3.8	6.7	none	---	none	---	---	---	
November	wet	3.3	3.8	6.7	6.7	6.7	6.7							
	moist	0.0	0.0	0.0	2.5	3.3	5.6	none	---	none	---	---	---	
December	wet	2.5	3.3	5.6	6.7	6.7	6.7							
	moist	0.0	0.0	0.0	3.8	4.1	6.2	none	---	none	---	---	---	
	wet	3.8	4.1	6.2	6.7	6.7	6.7							

Kratka (10 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	1.6	3.0	4.1	none	---	none	---	---	---	
	wet	1.6	3.0	4.1	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	2.5	3.3	4.9	none	---	none	---	---	---	
	wet	2.5	3.3	4.9	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	1.6	2.1	4.1	none	---	none	---	---	---	
	wet	1.6	2.1	4.1	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	0.0	0.5	2.5	none	---	occasional	brief	0.0-0.3-0.5		
	wet	0.0	0.5	2.5	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	0.5	0.8	3.3	none	---	occasional	very brief	0.0-0.3-0.5		
	wet	0.5	0.8	3.3	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	0.8	1.6	4.1	none	---	rare	very brief	0.0-0.1-0.3		
	wet	0.8	1.6	4.1	6.7	6.7	6.7							
July	moist	0.0	0.0	0.0	1.6	3.3	4.9	none	---	none	---	---	---	
	wet	1.6	3.3	4.9	6.7	6.7	6.7							
August	moist	0.0	0.0	0.0	2.5	4.1	5.7	none	---	none	---	---	---	
	wet	2.5	4.1	5.7	6.7	6.7	6.7							
September	moist	0.0	0.0	0.0	1.6	3.3	4.9	none	---	none	---	---	---	
	wet	1.6	3.3	4.9	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	1.3	2.5	4.1	none	---	rare	very brief	0.0-0.1-0.3		
	wet	1.3	2.5	4.1	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	0.8	1.6	3.3	none	---	rare	very brief	0.0-0.1-0.3		
	wet	0.8	1.6	3.3	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	1.3	2.1	3.8	none	---	none	---	---	---	
	wet	1.3	2.1	3.8	6.7	6.7	6.7							

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I17A (continued)

Roliss (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.3-2.1-3.3	none	---	none	---	---
	wet	1.3-2.1-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.3-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.3-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.7-1.3-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.7-1.3-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	2.0-3.3-4.9	none	---	rare	very brief	0.0-0.3-0.5
	wet	2.0-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.3-1.6-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Flaming (4 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.6-5.4-6.7	none	---	none	---	---
	wet	4.6-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	5.2-6.2-6.7	none	---	none	---	---
	wet	5.2-6.2-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.1-6.7	none	---	none	---	---
	wet	3.3-4.1-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	2.1-2.5-6.7	none	---	none	---	---
	wet	2.1-2.5-6.7	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.5-2.8-5.7	none	---	none	---	---
	wet	2.5-2.8-5.7	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.6-3.3-6.7					
July	wet	2.6-3.3-6.7	6.7-6.7-6.7					
	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
August	moist	0.0-0.0-0.7	6.7-6.7-6.7					
	dry	0.0-0.0-0.0	0.0-0.0-1.0	none	---	none	---	---
September	moist	0.0-0.0-1.0	6.7-6.7-6.7					
	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
October	moist	0.0-0.0-0.3	4.1-4.9-6.7					
	wet	4.1-4.9-6.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	4.1-4.9-6.7	none	---	none	---	---
	wet	4.1-4.9-6.7	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I17A (continued)

Grimstad (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	2.5-3.0-5.7	none	---	none	---	---
	wet	2.5-3.0-5.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.8-1.5-3.3	none	---	none	---	---
	wet	0.8-1.5-3.3	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	1.1-1.8-4.1	none	---	none	---	---
	wet	1.1-1.8-4.1	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.5-5.7-6.2					
August	wet	2.5-5.7-6.2	6.7-6.7-6.7					
	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
September	moist	0.0-0.0-0.5	6.7-6.7-6.7					
	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
October	moist	0.0-0.0-0.3	2.5-3.8-6.7					
	wet	2.5-3.8-6.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.0-3.0-5.6	none	---	none	---	---
	wet	2.0-3.0-5.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.6-2.5-4.9	none	---	none	---	---
	wet	1.6-2.5-4.9	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	2.0-3.3-5.4	none	---	none	---	---
	wet	2.0-3.3-5.4	6.7-6.7-6.7					

Linveltdt (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.8-5.4-6.7	none	---	none	---	---
	wet	4.8-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	5.2-5.7-6.7	none	---	none	---	---
	wet	5.2-5.7-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.3-2.5-4.9	none	---	none	---	---
	wet	1.3-2.5-4.9	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.0-3.0-5.6	none	---	none	---	---
	wet	2.0-3.0-5.6	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	2.6-3.6-6.2					
July	wet	2.6-3.6-6.2	6.7-6.7-6.7					
	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
August	moist	0.0-0.0-0.7	3.9-5.4-6.7					
	wet	3.9-5.4-6.7	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-1.0	none	---	none	---	---
	moist	0.0-0.0-1.0	5.4-6.7-6.7					
October	wet	5.4-6.7-6.7	6.7-6.7-6.7					
	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
November	moist	0.0-0.0-0.3	4.1-4.6-6.7					
	wet	4.1-4.6-6.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.6-3.9-6.7	none	---	none	---	---
	wet	3.6-3.9-6.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	2.5-3.3-5.7	none	---	none	---	---
	wet	2.5-3.3-5.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.9-4.6-6.2	none	---	none	---	---
	wet	3.9-4.6-6.2	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I17A (continued)

Eckvöll (1 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.6-5.4-6.7	none	---	none	---	---
	wet	4.6-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	4.9-5.7-6.7	none	---	none	---	---
	wet	4.9-5.7-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	2.1-2.5-4.6	none	---	none	---	---
	wet	2.1-2.5-4.6	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.6-3.1-5.2	none	---	none	---	---
	wet	2.6-3.1-5.2	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.6-3.8-6.2					
	wet	2.6-3.8-6.2	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	3.8-4.9-6.7					
	wet	3.8-4.9-6.7	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-0.8	none	---	none	---	---
	moist	0.0-0.0-0.8	5.2-6.7-6.7					
	wet	5.2-6.7-6.7	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	3.8-4.1-6.7					
	wet	3.8-4.1-6.7	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	3.3-3.8-6.7	none	---	none	---	---
	wet	3.3-3.8-6.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.5-3.3-5.6	none	---	none	---	---
	wet	2.5-3.3-5.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.8-4.1-6.2	none	---	none	---	---
	wet	3.8-4.1-6.2	6.7-6.7-6.7					

Strathcona (1 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

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I18A Foldahl loamy fine sand, 0 to 3 percent slopes

Foldahl (75 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	4.6	5.4	6.7	none	---	none	---	---	---	---
	wet	4.6	5.4	6.7	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	4.9	5.7	6.7	none	---	none	---	---	---	---
	wet	4.9	5.7	6.7	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	3.3	4.6	6.7	none	---	none	---	---	---	---
	wet	3.3	4.6	6.7	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	1.3	2.5	4.6	none	---	none	---	---	---	---
	wet	1.3	2.5	4.6	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	2.0	3.1	5.2	none	---	none	---	---	---	---
	wet	2.0	3.1	5.2	6.7	6.7	6.7							
June	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	---
	moist	0.0	0.0	0.3	2.6	3.8	6.2							
July	wet	2.6	3.8	6.2	6.7	6.7	6.7							
	dry	0.0	0.0	0.0	0.0	0.0	0.5	none	---	none	---	---	---	---
August	moist	0.0	0.0	0.5	3.8	4.9	6.7							
	wet	3.8	4.9	6.7	6.7	6.7	6.7							
September	dry	0.0	0.0	0.0	0.0	0.0	0.7	none	---	none	---	---	---	---
	moist	0.0	0.0	0.7	5.2	6.7	6.7							
October	wet	5.2	6.7	6.7	6.7	6.7	6.7							
	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	---
November	moist	0.0	0.0	0.3	3.8	4.1	6.7							
	wet	3.8	4.1	6.7	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	3.3	3.8	6.7	none	---	none	---	---	---	---
	wet	3.3	3.8	6.7	6.7	6.7	6.7							

Kratka (10 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	1.6	3.0	4.1	none	---	none	---	---	---	---
	wet	1.6	3.0	4.1	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	2.5	3.3	4.9	none	---	none	---	---	---	---
	wet	2.5	3.3	4.9	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	1.6	2.1	4.1	none	---	none	---	---	---	---
	wet	1.6	2.1	4.1	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	0.0	0.5	2.5	none	---	occasional	brief	0.0-0.3-0.5		
	wet	0.0	0.5	2.5	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	0.5	0.8	3.3	none	---	occasional	very brief	0.0-0.3-0.5		
	wet	0.5	0.8	3.3	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	0.8	1.6	4.1	none	---	rare	very brief	0.0-0.1-0.3		
	wet	0.8	1.6	4.1	6.7	6.7	6.7							
July	moist	0.0	0.0	0.0	1.6	3.3	4.9	none	---	none	---	---	---	---
	wet	1.6	3.3	4.9	6.7	6.7	6.7							
August	moist	0.0	0.0	0.0	2.5	4.1	5.7	none	---	none	---	---	---	---
	wet	2.5	4.1	5.7	6.7	6.7	6.7							
September	moist	0.0	0.0	0.0	1.6	3.3	4.9	none	---	none	---	---	---	---
	wet	1.6	3.3	4.9	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	1.3	2.5	4.1	none	---	rare	very brief	0.0-0.1-0.3		
	wet	1.3	2.5	4.1	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	0.8	1.6	3.3	none	---	rare	very brief	0.0-0.1-0.3		
	wet	0.8	1.6	3.3	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	1.3	2.1	3.8	none	---	none	---	---	---	---
	wet	1.3	2.1	3.8	6.7	6.7	6.7							

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I18A (continued)

Roliss (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.3-2.1-3.3	none	---	none	---	---
	wet	1.3-2.1-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.3-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.3-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.7-1.3-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.7-1.3-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	2.0-3.3-4.9	none	---	rare	very brief	0.0-0.3-0.5
	wet	2.0-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.3-1.6-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Flaming (4 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.6-5.4-6.7	none	---	none	---	---
	wet	4.6-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	5.2-6.2-6.7	none	---	none	---	---
	wet	5.2-6.2-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.1-6.7	none	---	none	---	---
	wet	3.3-4.1-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	2.1-2.5-6.7	none	---	none	---	---
	wet	2.1-2.5-6.7	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.5-2.8-5.7	none	---	none	---	---
	wet	2.5-2.8-5.7	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.6-3.3-6.7					
July	wet	2.6-3.3-6.7	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.7					
August	moist	0.0-0.0-0.7	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-1.0					
September	moist	0.0-0.0-1.0	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.3					
October	moist	0.0-0.0-0.3	4.1-4.9-6.7	none	---	none	---	---
	wet	4.1-4.9-6.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	4.1-4.9-6.7	none	---	none	---	---
	wet	4.1-4.9-6.7	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I18A (continued)

Grimstad (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	2.5-3.0-5.7	none	---	none	---	---
	wet	2.5-3.0-5.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.8-1.5-3.3	none	---	none	---	---
	wet	0.8-1.5-3.3	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	1.1-1.8-4.1	none	---	none	---	---
	wet	1.1-1.8-4.1	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.5-5.7-6.2					
August	wet	2.5-5.7-6.2	6.7-6.7-6.7					
	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
September	moist	0.0-0.0-0.5	6.7-6.7-6.7					
	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
October	moist	0.0-0.0-0.3	2.5-3.8-6.7					
	wet	2.5-3.8-6.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.0-3.0-5.6	none	---	none	---	---
	wet	2.0-3.0-5.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.6-2.5-4.9	none	---	none	---	---
	wet	1.6-2.5-4.9	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	2.0-3.3-5.4	none	---	none	---	---
	wet	2.0-3.3-5.4	6.7-6.7-6.7					

Linveltdt (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.8-5.4-6.7	none	---	none	---	---
	wet	4.8-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	5.2-5.7-6.7	none	---	none	---	---
	wet	5.2-5.7-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.3-2.5-4.9	none	---	none	---	---
	wet	1.3-2.5-4.9	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.0-3.0-5.6	none	---	none	---	---
	wet	2.0-3.0-5.6	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	2.6-3.6-6.2					
July	wet	2.6-3.6-6.2	6.7-6.7-6.7					
	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
August	moist	0.0-0.0-0.7	3.9-5.4-6.7					
	wet	3.9-5.4-6.7	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-1.0	none	---	none	---	---
	moist	0.0-0.0-1.0	5.4-6.7-6.7					
October	wet	5.4-6.7-6.7	6.7-6.7-6.7					
	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
November	moist	0.0-0.0-0.3	4.1-4.6-6.7					
	wet	4.1-4.6-6.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.6-3.9-6.7	none	---	none	---	---
	wet	3.6-3.9-6.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	2.5-3.3-5.7	none	---	none	---	---
	wet	2.5-3.3-5.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.9-4.6-6.2	none	---	none	---	---
	wet	3.9-4.6-6.2	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I18A (continued)

Eckvoll (1 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.6-5.4-6.7	none	---	none	---	---
	wet	4.6-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	4.9-5.7-6.7	none	---	none	---	---
	wet	4.9-5.7-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	2.1-2.5-4.6	none	---	none	---	---
	wet	2.1-2.5-4.6	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.6-3.1-5.2	none	---	none	---	---
	wet	2.6-3.1-5.2	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.6-3.8-6.2					
	wet	2.6-3.8-6.2	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	3.8-4.9-6.7					
	wet	3.8-4.9-6.7	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-0.8	none	---	none	---	---
	moist	0.0-0.0-0.8	5.2-6.7-6.7					
	wet	5.2-6.7-6.7	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	3.8-4.1-6.7					
	wet	3.8-4.1-6.7	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	3.3-3.8-6.7	none	---	none	---	---
	wet	3.3-3.8-6.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.5-3.3-5.6	none	---	none	---	---
	wet	2.5-3.3-5.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.8-4.1-6.2	none	---	none	---	---
	wet	3.8-4.1-6.2	6.7-6.7-6.7					

Strathcona (1 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

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I19A Foxhome sandy loam, 0 to 3 percent slopes

Foxhome (65 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.8-5.4-6.7	none	---	none	---	---
	wet	4.8-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	5.2-5.7-6.7	none	---	none	---	---
	wet	5.2-5.7-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.3-2.5-4.9	none	---	none	---	---
	wet	1.3-2.5-4.9	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.0-3.0-5.6	none	---	none	---	---
	wet	2.0-3.0-5.6	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	2.6-3.6-6.2					
July	wet	2.6-3.6-6.2	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.7					
August	moist	0.0-0.0-0.7	3.9-5.4-6.7	none	---	none	---	---
	wet	3.9-5.4-6.7	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-1.0	none	---	none	---	---
	moist	0.0-0.0-1.0	5.4-6.7-6.7					
October	wet	5.4-6.7-6.7	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.3	4.1-4.6-6.7					
November	moist	4.1-4.6-6.7	6.7-6.7-6.7	none	---	none	---	---
	wet	0.0-0.0-0.0	3.6-3.9-6.7					
December	moist	0.0-0.0-0.0	2.5-3.3-5.7	none	---	none	---	---
	wet	2.5-3.3-5.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.9-4.6-6.2	none	---	none	---	---
	wet	3.9-4.6-6.2	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I19A (continued)

Kittson (10 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.1-5.4-6.7	none	---	none	---	---
	wet	4.1-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	4.9-5.9-6.7	none	---	none	---	---
	wet	4.9-5.9-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.9-6.7	none	---	none	---	---
	wet	3.3-4.9-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.6-2.5-4.1	none	---	none	---	---
	wet	1.6-2.5-4.1	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.1-2.8-4.9	none	---	none	---	---
	wet	2.1-2.8-4.9	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.6-3.1-5.7					
July	wet	2.6-3.1-5.7	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.3					
August	moist	0.0-0.0-0.3	3.3-5.7-6.7	none	---	none	---	---
	wet	3.3-5.7-6.7	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	4.9-6.7-6.7					
October	wet	4.9-6.7-6.7	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.3					
November	moist	0.0-0.0-0.3	3.6-4.9-6.7	none	---	none	---	---
	wet	3.6-4.9-6.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.0-4.3-5.7	none	---	none	---	---
	wet	3.0-4.3-5.7	6.7-6.7-6.7					

Strandquist (10 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I19A (continued)

Foldahl (5 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	4.6	5.4	6.7	none	---	none	---	---	---	---
	wet	4.6	5.4	6.7	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	4.9	5.7	6.7	none	---	none	---	---	---	---
	wet	4.9	5.7	6.7	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	3.3	4.6	6.7	none	---	none	---	---	---	---
	wet	3.3	4.6	6.7	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	1.3	2.5	4.6	none	---	none	---	---	---	---
	wet	1.3	2.5	4.6	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	2.0	3.1	5.2	none	---	none	---	---	---	---
	wet	2.0	3.1	5.2	6.7	6.7	6.7							
June	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	---
	moist	0.0	0.0	0.3	2.6	3.8	6.2							
	wet	2.6	3.8	6.2	6.7	6.7	6.7							
July	dry	0.0	0.0	0.0	0.0	0.0	0.5	none	---	none	---	---	---	---
	moist	0.0	0.0	0.5	3.8	4.9	6.7							
	wet	3.8	4.9	6.7	6.7	6.7	6.7							
August	dry	0.0	0.0	0.0	0.0	0.0	0.7	none	---	none	---	---	---	---
	moist	0.0	0.0	0.7	5.2	6.7	6.7							
	wet	5.2	6.7	6.7	6.7	6.7	6.7							
September	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	---
	moist	0.0	0.0	0.3	3.8	4.1	6.7							
	wet	3.8	4.1	6.7	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	3.3	3.8	6.7	none	---	none	---	---	---	---
	wet	3.3	3.8	6.7	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	2.5	3.3	5.6	none	---	none	---	---	---	---
	wet	2.5	3.3	5.6	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	3.8	4.1	6.2	none	---	none	---	---	---	---
	wet	3.8	4.1	6.2	6.7	6.7	6.7							

Grimstad (5 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	2.5	3.8	5.7	none	---	none	---	---	---	---
	wet	2.5	3.8	5.7	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	3.3	4.6	6.7	none	---	none	---	---	---	---
	wet	3.3	4.6	6.7	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	2.5	3.0	5.7	none	---	none	---	---	---	---
	wet	2.5	3.0	5.7	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	0.8	1.5	3.3	none	---	none	---	---	---	---
	wet	0.8	1.5	3.3	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	1.1	1.8	4.1	none	---	none	---	---	---	---
	wet	1.1	1.8	4.1	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	1.6	3.3	4.9	none	---	none	---	---	---	---
	wet	1.6	3.3	4.9	6.7	6.7	6.7							
July	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	---
	moist	0.0	0.0	0.3	2.5	5.7	6.2							
August	wet	2.5	5.7	6.2	6.7	6.7	6.7							
	dry	0.0	0.0	0.0	0.0	0.0	0.5	none	---	none	---	---	---	---
September	moist	0.0	0.0	0.5	6.7	6.7	6.7							
	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	---
	moist	0.0	0.0	0.3	2.5	3.8	6.7							
October	wet	2.5	3.8	6.7	6.7	6.7	6.7							
	moist	0.0	0.0	0.0	2.0	3.0	5.6	none	---	none	---	---	---	---
November	wet	2.0	3.0	5.6	6.7	6.7	6.7							
	moist	0.0	0.0	0.0	1.6	2.5	4.9	none	---	none	---	---	---	---
December	wet	1.6	2.5	4.9	6.7	6.7	6.7							
	moist	0.0	0.0	0.0	2.0	3.3	5.4	none	---	none	---	---	---	---
	wet	2.0	3.3	5.4	6.7	6.7	6.7							

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I19A (continued)

Roliss (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.3-2.1-3.3	none	---	none	---	---
	wet	1.3-2.1-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.3-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.3-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.7-1.3-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.7-1.3-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	2.0-3.3-4.9	none	---	rare	very brief	0.0-0.3-0.5
	wet	2.0-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.3-1.6-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Mavie (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

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I20A Foxlake loam, 0 to 2 percent slopes

Foxlake (75 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.8-2.1-4.1	none	---	none	---	---
	wet	0.8-2.1-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.6-2.5-4.9	none	---	none	---	---
	wet	1.6-2.5-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.3-1.3-3.3	none	---	none	---	---
	wet	0.3-1.3-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-1.6	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.3-2.1-4.1	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	occasional	very brief	0.0-0.2-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					

Clearwater (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.8-2.1-4.1	none	---	none	---	---
	wet	0.8-2.1-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.6-2.5-4.9	none	---	none	---	---
	wet	1.6-2.5-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.3-1.3-3.3	none	---	none	---	---
	wet	0.3-1.3-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-1.6	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.3-2.1-4.1	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	occasional	very brief	0.0-0.2-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I20A (continued)

Foxlake, very cobbly (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.8-2.1-4.1	none	---	none	---	---
	wet	0.8-2.1-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.6-2.5-4.9	none	---	none	---	---
	wet	1.6-2.5-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.3-1.3-3.3	none	---	none	---	---
	wet	0.3-1.3-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-1.6	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.3-2.1-4.1	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	occasional	very brief	0.0-0.2-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					

Augsburg (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.0-2.6-4.9	none	---	none	---	---
	wet	2.0-2.6-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.5-2.3-4.9	none	---	none	---	---
	wet	1.5-2.3-4.9	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	occasional	brief	0.0-0.3-0.5
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.0-3.9	none	---	none	---	---
	wet	1.3-2.0-3.9	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I20A (continued)

Clearwater, depressional (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	0.8-1.6-3.0	none	---	occasional	long	0.0-0.5-1.0
	wet	0.8-1.6-3.0	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-1.6	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.5-1.6	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.5-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.8-1.6-3.0	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.8-1.6-3.0	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.3-0.8-2.0	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.3-0.8-2.0	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.2-0.5-1.6	none	---	occasional	long	0.0-0.5-1.0
	wet	0.2-0.5-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.3-0.8-2.0	none	---	occasional	long	0.0-0.5-1.0
	wet	0.3-0.8-2.0	6.7-6.7-6.7					

Espelie (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.0-2.6-4.9	none	---	none	---	---
	wet	2.0-2.6-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.5-2.3-4.9	none	---	none	---	---
	wet	1.5-2.3-4.9	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.0-3.9	none	---	none	---	---
	wet	1.3-2.0-3.9	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I20A (continued)

Hilaire (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.6-5.4-6.7	none	---	none	---	---
	wet	4.6-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	4.9-5.7-6.7	none	---	none	---	---
	wet	4.9-5.7-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.6-2.5-4.6	none	---	none	---	---
	wet	1.6-2.5-4.6	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.3-3.0-5.2	none	---	none	---	---
	wet	2.3-3.0-5.2	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.8-3.8-6.2					
July	wet	2.8-3.8-6.2	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.5					
August	moist	0.0-0.0-0.5	3.8-4.6-6.7	none	---	none	---	---
	wet	3.8-4.6-6.7	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
	moist	0.0-0.0-0.7	5.2-6.7-6.7					
October	wet	5.2-6.7-6.7	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.5					
November	moist	0.0-0.0-0.5	3.8-4.1-6.7	none	---	none	---	---
	wet	3.8-4.1-6.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.3-3.8-6.7	none	---	none	---	---
	wet	3.3-3.8-6.7	6.7-6.7-6.7					

Reis (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.0-2.6-4.9	none	---	none	---	---
	wet	2.0-2.6-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.8-2.0-3.9	none	---	none	---	---
	wet	0.8-2.0-3.9	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	none	---	---
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.3-0.8-3.0	none	---	none	---	---
	wet	0.3-0.8-3.0	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-3.6	none	---	none	---	---
	wet	0.8-1.6-3.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-2.8-4.6	none	---	none	---	---
	wet	1.6-2.8-4.6	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.6-5.4	none	---	none	---	---
	wet	2.5-3.6-5.4	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.1-4.6	none	---	none	---	---
	wet	1.6-3.1-4.6	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.1-2.0-4.1	none	---	none	---	---
	wet	1.1-2.0-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.7-1.6-3.3	none	---	none	---	---
	wet	0.7-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.1-2.0-3.8	none	---	none	---	---
	wet	1.1-2.0-3.8	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I20A (continued)

Wheatville (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	2.5-3.0-5.7	none	---	none	---	---
	wet	2.5-3.0-5.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.7-1.3-3.3	none	---	none	---	---
	wet	0.7-1.3-3.3	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	1.0-1.6-4.1	none	---	none	---	---
	wet	1.0-1.6-4.1	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	1.6-2.5-4.9	none	---	none	---	---
	wet	1.6-2.5-4.9	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	2.5-3.8-6.2	none	---	none	---	---
	wet	2.5-3.8-6.2	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	3.8-6.7-6.7					
	wet	3.8-6.7-6.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	2.5-3.8-6.2	none	---	none	---	---
	wet	2.5-3.8-6.2	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	2.0-3.0-5.6	none	---	none	---	---
	wet	2.0-3.0-5.6	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	1.6-2.5-4.9	none	---	none	---	---
	wet	1.6-2.5-4.9	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	2.0-3.3-5.4	none	---	none	---	---
	wet	2.0-3.3-5.4	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

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I21A Fram loam, 1 to 3 percent slopes

Fram (85 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.1-5.4-6.7	none	---	none	---	---
	wet	4.1-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	4.9-5.9-6.7	none	---	none	---	---
	wet	4.9-5.9-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.9-6.7	none	---	none	---	---
	wet	3.3-4.9-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.6-2.5-4.1	none	---	none	---	---
	wet	1.6-2.5-4.1	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.1-2.8-4.9	none	---	none	---	---
	wet	2.1-2.8-4.9	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.0	2.6-3.1-5.7					
July	wet	2.6-3.1-5.7	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.2-0.3					
August	moist	0.0-0.2-0.3	3.3-5.7-6.7	none	---	none	---	---
	wet	3.3-5.7-6.7	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.2-0.5	none	---	none	---	---
	moist	0.0-0.2-0.5	4.9-6.7-6.7					
October	wet	4.9-6.7-6.7	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.3					
November	moist	0.0-0.0-0.0	3.6-4.9-6.7	none	---	none	---	---
	wet	3.6-4.9-6.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.0-4.3-5.7	none	---	none	---	---
	wet	3.0-4.3-5.7	6.7-6.7-6.7					

Hedman (12 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.3-2.1-3.3	none	---	none	---	---
	wet	1.3-2.1-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.3-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.3-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.7-1.3-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.7-1.3-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	2.0-3.3-4.9	none	---	rare	very brief	0.0-0.3-0.5
	wet	2.0-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.3-1.6-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I21A (continued)

Strathcona (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Foxhome (1 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.8-5.4-6.7	none	---	none	---	---
	wet	4.8-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	5.2-5.7-6.7	none	---	none	---	---
	wet	5.2-5.7-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.3-2.5-4.9	none	---	none	---	---
	wet	1.3-2.5-4.9	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.0-3.0-5.6	none	---	none	---	---
	wet	2.0-3.0-5.6	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	2.6-3.6-6.2					
July	wet	2.6-3.6-6.2	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.7					
August	moist	0.0-0.0-0.7	3.9-5.4-6.7	none	---	none	---	---
	wet	3.9-5.4-6.7	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-1.0	none	---	none	---	---
	moist	0.0-0.0-1.0	5.4-6.7-6.7					
October	wet	5.4-6.7-6.7	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.3					
November	moist	0.0-0.0-0.3	4.1-4.6-6.7	none	---	none	---	---
	wet	4.1-4.6-6.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.6-3.9-6.7	none	---	none	---	---
	wet	3.6-3.9-6.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	2.5-3.3-5.7	none	---	none	---	---
	wet	2.5-3.3-5.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.9-4.6-6.2	none	---	none	---	---
	wet	3.9-4.6-6.2	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

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I22A Glyndon loam, 0 to 2 percent slopes

Glyndon (75 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	2.5	4.1	6.7	none	---	none	---	---	---	---
	wet	2.5	4.1	6.7	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	3.3	4.9	6.7	none	---	none	---	---	---	---
	wet	3.3	4.9	6.7	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	2.5	3.9	5.7	none	---	none	---	---	---	---
	wet	2.5	3.9	5.7	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	0.7	1.0	3.3	none	---	none	---	---	---	---
	wet	0.7	1.0	3.3	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	1.0	1.6	4.1	none	---	none	---	---	---	---
	wet	1.0	1.6	4.1	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	1.6	2.5	4.9	none	---	none	---	---	---	---
	wet	1.6	2.5	4.9	6.7	6.7	6.7							
July	dry	0.0	0.0	0.0	0.0	0.0	0.2	none	---	none	---	---	---	---
	moist	0.0	0.0	0.2	2.5	3.9	6.7							
August	wet	2.5	3.9	6.7	6.7	6.7	6.7	none	---	none	---	---	---	---
	dry	0.0	0.0	0.0	0.0	0.0	0.3							
September	moist	0.0	0.0	0.0	3.3	6.7	6.7	none	---	none	---	---	---	---
	wet	3.3	6.7	6.7	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	2.5	4.6	6.2	none	---	none	---	---	---	---
	wet	2.5	4.6	6.2	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	2.0	4.1	5.7	none	---	none	---	---	---	---
	wet	2.0	4.1	5.7	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	1.6	3.0	4.1	none	---	none	---	---	---	---
	wet	1.6	3.0	4.1	6.7	6.7	6.7							
	moist	0.0	0.0	0.0	2.0	3.8	4.9	none	---	none	---	---	---	---
	wet	2.0	3.8	4.9	6.7	6.7	6.7							

Borup (10 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	1.6	3.0	4.1	none	---	none	---	---	---	---
	wet	1.6	3.0	4.1	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	2.5	3.3	4.9	none	---	none	---	---	---	---
	wet	2.5	3.3	4.9	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	1.3	2.1	3.3	none	---	none	---	---	---	---
	wet	1.3	2.1	3.3	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	0.0	0.5	2.5	none	---	occasional	brief	0.0-0.3-0.5	---	---
	wet	0.0	0.5	2.5	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	0.3	0.8	3.3	none	---	occasional	brief	0.0-0.3-0.5	---	---
	wet	0.3	0.8	3.3	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	0.7	1.3	4.1	none	---	occasional	very brief	0.0-0.3-0.5	---	---
	wet	0.7	1.3	4.1	6.7	6.7	6.7							
July	moist	0.0	0.0	0.0	1.6	3.0	4.9	none	---	none	---	---	---	---
	wet	1.6	3.0	4.9	6.7	6.7	6.7							
August	moist	0.0	0.0	0.0	2.5	3.8	5.7	none	---	none	---	---	---	---
	wet	2.5	3.8	5.7	6.7	6.7	6.7							
September	moist	0.0	0.0	0.0	2.0	3.3	4.9	none	---	rare	very brief	0.0-0.1-0.3	---	---
	wet	2.0	3.3	4.9	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	1.3	1.6	4.1	none	---	rare	very brief	0.0-0.1-0.3	---	---
	wet	1.3	1.6	4.1	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	0.8	1.3	3.3	none	---	occasional	very brief	0.0-0.1-0.3	---	---
	wet	0.8	1.3	3.3	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	1.3	2.1	3.8	none	---	none	---	---	---	---
	wet	1.3	2.1	3.8	6.7	6.7	6.7							

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I22A (continued)

## Augsburg (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.0-2.6-4.9	none	---	none	---	---
	wet	2.0-2.6-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.5-2.3-4.9	none	---	none	---	---
	wet	1.5-2.3-4.9	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	occasional	brief	0.0-0.3-0.5
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.0-3.9	none	---	none	---	---
	wet	1.3-2.0-3.9	6.7-6.7-6.7					

## Ulen (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.6-3.3-5.9	none	---	none	---	---
	wet	2.6-3.3-5.9	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	3.3-4.1-6.7	none	---	none	---	---
	wet	3.3-4.1-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	2.6-3.3-5.7	none	---	none	---	---
	wet	2.6-3.3-5.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.5-2.0-3.3	none	---	none	---	---
	wet	1.5-2.0-3.3	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.0-2.5-4.1	none	---	none	---	---
	wet	2.0-2.5-4.1	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.5-3.0-4.9					
July	wet	2.5-3.0-4.9	6.7-6.7-6.7					
	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
August	moist	0.0-0.0-0.5	3.0-4.9-6.2					
	wet	3.0-4.9-6.2	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
	moist	0.0-0.0-0.7	6.7-6.7-6.7					
October	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.6-4.9-6.7					
November	wet	2.6-4.9-6.7	6.7-6.7-6.7					
	moist	0.0-0.0-0.0	2.3-3.0-5.7	none	---	none	---	---
December	wet	2.3-3.0-5.7	6.7-6.7-6.7					
	moist	0.0-0.0-0.0	2.0-2.5-4.9	none	---	none	---	---
December	wet	2.0-2.5-4.9	6.7-6.7-6.7					
	moist	0.0-0.0-0.0	2.3-3.0-5.2	none	---	none	---	---
December	wet	2.3-3.0-5.2	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I22A (continued)

Wheatville (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	2.5-3.0-5.7	none	---	none	---	---
	wet	2.5-3.0-5.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.7-1.3-3.3	none	---	none	---	---
	wet	0.7-1.3-3.3	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	1.0-1.6-4.1	none	---	none	---	---
	wet	1.0-1.6-4.1	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	1.6-2.5-4.9	none	---	none	---	---
	wet	1.6-2.5-4.9	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	2.5-3.8-6.2	none	---	none	---	---
	wet	2.5-3.8-6.2	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	3.8-6.7-6.7					
	wet	3.8-6.7-6.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	2.5-3.8-6.2	none	---	none	---	---
	wet	2.5-3.8-6.2	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	2.0-3.0-5.6	none	---	none	---	---
	wet	2.0-3.0-5.6	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	1.6-2.5-4.9	none	---	none	---	---
	wet	1.6-2.5-4.9	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	2.0-3.3-5.4	none	---	none	---	---
	wet	2.0-3.3-5.4	6.7-6.7-6.7					

Flaming (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.6-5.4-6.7	none	---	none	---	---
	wet	4.6-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	5.2-6.2-6.7	none	---	none	---	---
	wet	5.2-6.2-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.1-6.7	none	---	none	---	---
	wet	3.3-4.1-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	2.1-2.5-6.7	none	---	none	---	---
	wet	2.1-2.5-6.7	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.5-2.8-5.7	none	---	none	---	---
	wet	2.5-2.8-5.7	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.6-3.3-6.7					
July	wet	2.6-3.3-6.7	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.7					
August	moist	0.0-0.0-0.7	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-1.0					
September	moist	0.0-0.0-1.0	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.3					
	moist	0.0-0.0-0.3	4.1-4.9-6.7					
October	wet	4.1-4.9-6.7	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.0	3.3-4.6-6.7					
November	wet	3.3-4.6-6.7	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.0	2.5-4.1-5.7					
December	wet	2.5-4.1-5.7	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.0	4.1-4.9-6.7					
	wet	4.1-4.9-6.7	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

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I23A Glyndon very fine sandy loam, 0 to 2 percent slopes

Glyndon (75 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.5-4.1-6.7	none	---	none	---	---
	wet	2.5-4.1-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	3.3-4.9-6.7	none	---	none	---	---
	wet	3.3-4.9-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	2.5-3.9-5.7	none	---	none	---	---
	wet	2.5-3.9-5.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.7-1.0-3.3	none	---	none	---	---
	wet	0.7-1.0-3.3	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	1.0-1.6-4.1	none	---	none	---	---
	wet	1.0-1.6-4.1	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	1.6-2.5-4.9	none	---	none	---	---
	wet	1.6-2.5-4.9	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.2	none	---	none	---	---
	moist	0.0-0.0-0.2	2.5-3.9-6.7					
	wet	2.5-3.9-6.7	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	3.3-6.7-6.7					
	wet	3.3-6.7-6.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	2.5-4.6-6.2	none	---	none	---	---
	wet	2.5-4.6-6.2	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	2.0-4.1-5.7	none	---	none	---	---
	wet	2.0-4.1-5.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	2.0-3.8-4.9	none	---	none	---	---
	wet	2.0-3.8-4.9	6.7-6.7-6.7					

Borup (10 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.3-2.1-3.3	none	---	none	---	---
	wet	1.3-2.1-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.3-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.3-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.7-1.3-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.7-1.3-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	2.0-3.3-4.9	none	---	rare	very brief	0.0-0.1-0.3
	wet	2.0-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-1.6-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-1.6-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	very brief	0.0-0.1-0.3
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I23A (continued)

Augsburg (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.0-2.6-4.9	none	---	none	---	---
	wet	2.0-2.6-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.5-2.3-4.9	none	---	none	---	---
	wet	1.5-2.3-4.9	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	occasional	brief	0.0-0.3-0.5
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.0-3.9	none	---	none	---	---
	wet	1.3-2.0-3.9	6.7-6.7-6.7					

Ulen (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.6-3.3-5.9	none	---	none	---	---
	wet	2.6-3.3-5.9	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	3.3-4.1-6.7	none	---	none	---	---
	wet	3.3-4.1-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	2.6-3.3-5.7	none	---	none	---	---
	wet	2.6-3.3-5.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.5-2.0-3.3	none	---	none	---	---
	wet	1.5-2.0-3.3	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.0-2.5-4.1	none	---	none	---	---
	wet	2.0-2.5-4.1	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.5-3.0-4.9					
	wet	2.5-3.0-4.9	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	3.0-4.9-6.2					
	wet	3.0-4.9-6.2	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
	moist	0.0-0.0-0.7	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	2.6-4.9-6.7					
	wet	2.6-4.9-6.7	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	2.3-3.0-5.7	none	---	none	---	---
	wet	2.3-3.0-5.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.0-2.5-4.9	none	---	none	---	---
	wet	2.0-2.5-4.9	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	2.3-3.0-5.2	none	---	none	---	---
	wet	2.3-3.0-5.2	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I23A (continued)

Wheatville (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	2.5-3.0-5.7	none	---	none	---	---
	wet	2.5-3.0-5.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.7-1.3-3.3	none	---	none	---	---
	wet	0.7-1.3-3.3	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	1.0-1.6-4.1	none	---	none	---	---
	wet	1.0-1.6-4.1	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	1.6-2.5-4.9	none	---	none	---	---
	wet	1.6-2.5-4.9	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	2.5-3.8-6.2	none	---	none	---	---
	wet	2.5-3.8-6.2	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	3.8-6.7-6.7					
September	wet	3.8-6.7-6.7	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.0	2.5-3.8-6.2					
October	wet	2.5-3.8-6.2	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.0	2.0-3.0-5.6					
November	wet	2.0-3.0-5.6	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.0	1.6-2.5-4.9					
December	wet	1.6-2.5-4.9	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.0	2.0-3.3-5.4					
	wet	2.0-3.3-5.4	6.7-6.7-6.7					

Flaming (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.6-5.4-6.7	none	---	none	---	---
	wet	4.6-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	5.2-6.2-6.7	none	---	none	---	---
	wet	5.2-6.2-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.1-6.7	none	---	none	---	---
	wet	3.3-4.1-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	2.1-2.5-6.7	none	---	none	---	---
	wet	2.1-2.5-6.7	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.5-2.8-5.7	none	---	none	---	---
	wet	2.5-2.8-5.7	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.6-3.3-6.7					
July	wet	2.6-3.3-6.7	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.7					
August	moist	0.0-0.0-0.7	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-1.0					
September	moist	0.0-0.0-1.0	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.3					
October	moist	0.0-0.0-0.3	4.1-4.9-6.7	none	---	none	---	---
	wet	4.1-4.9-6.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
	moist	0.0-0.0-0.0	4.1-4.9-6.7					
	wet	4.1-4.9-6.7	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

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I24A Grimstad fine sandy loam, 0 to 3 percent slopes

Grimstad (70 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	2.5-3.0-5.7	none	---	none	---	---
	wet	2.5-3.0-5.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.8-1.5-3.3	none	---	none	---	---
	wet	0.8-1.5-3.3	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	1.1-1.8-4.1	none	---	none	---	---
	wet	1.1-1.8-4.1	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.5-5.7-6.2					
August	wet	2.5-5.7-6.2	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.5					
September	moist	0.0-0.0-0.5	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.3					
October	moist	0.0-0.0-0.3	2.5-3.8-6.7	none	---	none	---	---
	wet	2.5-3.8-6.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.0-3.0-5.6	none	---	none	---	---
	wet	2.0-3.0-5.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.6-2.5-4.9	none	---	none	---	---
	wet	1.6-2.5-4.9	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	2.0-3.3-5.4	none	---	none	---	---
	wet	2.0-3.3-5.4	6.7-6.7-6.7					

Strathcona (12 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I24A (continued)

Foldahl (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.6-5.4-6.7	none	---	none	---	---
	wet	4.6-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	4.9-5.7-6.7	none	---	none	---	---
	wet	4.9-5.7-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.3-2.5-4.6	none	---	none	---	---
	wet	1.3-2.5-4.6	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.0-3.1-5.2	none	---	none	---	---
	wet	2.0-3.1-5.2	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.6-3.8-6.2					
July	wet	2.6-3.8-6.2	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.5					
August	moist	0.0-0.0-0.5	3.8-4.9-6.7	none	---	none	---	---
	wet	3.8-4.9-6.7	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
	moist	0.0-0.0-0.7	5.2-6.7-6.7					
October	wet	5.2-6.7-6.7	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.3	3.8-4.1-6.7					
November	moist	0.0-0.0-0.3	3.8-4.1-6.7	none	---	none	---	---
	wet	3.8-4.1-6.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.3-3.8-6.7	none	---	none	---	---
	wet	3.3-3.8-6.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	2.5-3.3-5.6	none	---	none	---	---
	wet	2.5-3.3-5.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.8-4.1-6.2	none	---	none	---	---
	wet	3.8-4.1-6.2	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I24A (continued)

Hamerly (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	3.3-4.9-6.7	none	---	none	---	---
	wet	3.3-4.9-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.7-1.3-3.3	none	---	none	---	---
	wet	0.7-1.3-3.3	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	1.0-1.5-4.1	none	---	none	---	---
	wet	1.0-1.5-4.1	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	1.6-2.0-4.9	none	---	none	---	---
	wet	1.6-2.0-4.9	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.5-3.3-5.4					
	wet	2.5-3.3-5.4	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	3.3-6.7-6.7					
	wet	3.3-6.7-6.7	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.5-4.6-5.7					
	wet	2.5-4.6-5.7	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	2.0-3.9-4.9	none	---	none	---	---
	wet	2.0-3.9-4.9	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	2.0-3.8-4.9	none	---	none	---	---
	wet	2.0-3.8-4.9	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I24A (continued)

Foxhome (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.8-5.4-6.7	none	---	none	---	---
	wet	4.8-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	5.2-5.7-6.7	none	---	none	---	---
	wet	5.2-5.7-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.3-2.5-4.9	none	---	none	---	---
	wet	1.3-2.5-4.9	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.0-3.0-5.6	none	---	none	---	---
	wet	2.0-3.0-5.6	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	2.6-3.6-6.2					
July	wet	2.6-3.6-6.2	6.7-6.7-6.7					
	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
August	moist	0.0-0.0-0.7	3.9-5.4-6.7					
	wet	3.9-5.4-6.7	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-1.0	none	---	none	---	---
	moist	0.0-0.0-1.0	5.4-6.7-6.7					
October	wet	5.4-6.7-6.7	6.7-6.7-6.7					
	moist	0.0-0.0-0.3	4.1-4.6-6.7	none	---	none	---	---
November	wet	4.1-4.6-6.7	6.7-6.7-6.7					
	moist	0.0-0.0-0.0	3.6-3.9-6.7	none	---	none	---	---
December	wet	3.6-3.9-6.7	6.7-6.7-6.7					
	moist	0.0-0.0-0.0	2.5-3.3-5.7	none	---	none	---	---
December	wet	2.5-3.3-5.7	6.7-6.7-6.7					
	moist	0.0-0.0-0.0	3.9-4.6-6.2	none	---	none	---	---
December	wet	3.9-4.6-6.2	6.7-6.7-6.7					



Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I24A (continued)

Ulen (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.6-3.3-5.9	none	---	none	---	---
	wet	2.6-3.3-5.9	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	3.3-4.1-6.7	none	---	none	---	---
	wet	3.3-4.1-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	2.6-3.3-5.7	none	---	none	---	---
	wet	2.6-3.3-5.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.5-2.0-3.3	none	---	none	---	---
	wet	1.5-2.0-3.3	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.0-2.5-4.1	none	---	none	---	---
	wet	2.0-2.5-4.1	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.5-3.0-4.9					
	wet	2.5-3.0-4.9	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	3.0-4.9-6.2					
	wet	3.0-4.9-6.2	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
	moist	0.0-0.0-0.7	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.6-4.9-6.7					
	wet	2.6-4.9-6.7	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	2.3-3.0-5.7	none	---	none	---	---
	wet	2.3-3.0-5.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.0-2.5-4.9	none	---	none	---	---
	wet	2.0-2.5-4.9	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	2.3-3.0-5.2	none	---	none	---	---
	wet	2.3-3.0-5.2	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

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I25A Hamar loamy fine sand, 0 to 2 percent slopes

Hamar (75 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth			
		L	R	H	L	R	H					L	R	H	
January	moist	0.0	0.0	0.0	2.0	2.5	4.9	none	---	none	---	---			
	wet	2.0	2.5	4.9	6.7	6.7	6.7								
February	moist	0.0	0.0	0.0	2.5	3.3	5.7	none	---	none	---	---			
	wet	2.5	3.3	5.7	6.7	6.7	6.7								
March	moist	0.0	0.0	0.0	1.6	2.1	4.1	none	---	none	---	---			
	wet	1.6	2.1	4.1	6.7	6.7	6.7								
April	moist	0.0	0.0	0.0	0.0	0.5	2.5	none	---	occasional	brief	0.0-0.3-0.5			
	wet	0.0	0.5	2.5	6.7	6.7	6.7								
May	moist	0.0	0.0	0.0	0.5	1.3	3.3	none	---	occasional	very brief	0.0-0.3-0.5			
	wet	0.5	1.3	3.3	6.7	6.7	6.7								
June	moist	0.0	0.0	0.0	0.8	1.6	4.1	none	---	rare	very brief	0.0-0.3-0.5			
	wet	0.8	1.6	4.1	6.7	6.7	6.7								
July	moist	0.0	0.0	0.0	1.6	3.3	4.9	none	---	none	---	---			
	wet	1.6	3.3	4.9	6.7	6.7	6.7								
August	moist	0.0	0.0	0.0	2.5	4.9	5.7	none	---	none	---	---			
	wet	2.5	4.9	5.7	6.7	6.7	6.7								
September	moist	0.0	0.0	0.0	1.3	3.0	4.9	none	---	none	---	---			
	wet	1.3	3.0	4.9	6.7	6.7	6.7								
October	moist	0.0	0.0	0.0	1.0	2.1	4.1	none	---	rare	very brief	0.0-0.3-0.5			
	wet	1.0	2.1	4.1	6.7	6.7	6.7								
November	moist	0.0	0.0	0.0	0.8	1.6	3.3	none	---	none	---	---			
	wet	0.8	1.6	3.3	6.7	6.7	6.7								
December	moist	0.0	0.0	0.0	1.3	2.1	4.1	none	---	none	---	---			
	wet	1.3	2.1	4.1	6.7	6.7	6.7								

Garborg (10 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth			
		L	R	H	L	R	H					L	R	H	
January	moist	0.0	0.0	0.0	2.6	3.3	5.9	none	---	none	---	---			
	wet	2.6	3.3	5.9	6.7	6.7	6.7								
February	moist	0.0	0.0	0.0	3.3	4.1	6.7	none	---	none	---	---			
	wet	3.3	4.1	6.7	6.7	6.7	6.7								
March	moist	0.0	0.0	0.0	2.6	3.3	5.7	none	---	none	---	---			
	wet	2.6	3.3	5.7	6.7	6.7	6.7								
April	moist	0.0	0.0	0.0	1.1	1.5	3.3	none	---	none	---	---			
	wet	1.1	1.5	3.3	6.7	6.7	6.7								
May	moist	0.0	0.0	0.0	1.5	1.8	4.1	none	---	none	---	---			
	wet	1.5	1.8	4.1	6.7	6.7	6.7								
June	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---			
	moist	0.0	0.0	0.3	2.0	2.5	4.9								
July	wet	2.0	2.5	4.9	6.7	6.7	6.7								
	dry	0.0	0.0	0.0	0.0	0.0	0.5	none	---	none	---	---			
August	moist	0.0	0.0	0.5	2.6	4.9	6.2								
	wet	2.6	4.9	6.2	6.7	6.7	6.7								
September	dry	0.0	0.0	0.0	0.0	0.0	0.7	none	---	none	---	---			
	moist	0.0	0.0	0.7	6.7	6.7	6.7								
October	moist	0.0	0.0	0.3	2.6	4.9	6.7								
	wet	2.6	4.9	6.7	6.7	6.7	6.7								
November	moist	0.0	0.0	0.0	2.3	3.0	5.7	none	---	none	---	---			
	wet	2.3	3.0	5.7	6.7	6.7	6.7								
December	moist	0.0	0.0	0.0	2.0	2.5	4.9	none	---	none	---	---			
	wet	2.0	2.5	4.9	6.7	6.7	6.7								

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I25A (continued)

Rosewood (7 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.0-2.5-4.9	none	---	none	---	---
	wet	2.0-2.5-4.9	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-5.7	none	---	none	---	---
	wet	2.5-3.3-5.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-1.3-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-1.3-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.9-5.7	none	---	none	---	---
	wet	2.5-4.9-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.3-3.0-4.9	none	---	none	---	---
	wet	1.3-3.0-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.0-2.1-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.0-2.1-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	none	---	---
	wet	1.3-2.1-4.1	6.7-6.7-6.7					

Venlo (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.8-1.6-3.0	none	---	occasional	long	0.0-0.5-1.0
	wet	0.8-1.6-3.0	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.0-3.0-3.6	none	---	occasional	long	0.0-0.5-1.0
	wet	2.0-3.0-3.6	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.5-2.0	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.5-2.0	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-1.0	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.0	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.5-2.0	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.5-2.0	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.3-1.3-2.6	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.3-1.3-2.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.0-2.1-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.0-2.1-3.3	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.0-3.0-3.8	none	---	rare	very brief	0.0-0.3-0.5
	wet	2.0-3.0-3.8	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.0-2.1-3.3	none	---	rare	brief	0.0-0.3-0.5
	wet	1.0-2.1-3.3	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.7-1.6-2.6	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.7-1.6-2.6	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.3-1.3-2.0	none	---	occasional	long	0.0-0.5-1.0
	wet	0.3-1.3-2.0	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.7-1.6-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.7-1.6-2.5	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I25A (continued)

Flaming (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.6-5.4-6.7	none	---	none	---	---
	wet	4.6-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	5.2-6.2-6.7	none	---	none	---	---
	wet	5.2-6.2-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.1-6.7	none	---	none	---	---
	wet	3.3-4.1-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	2.1-2.5-6.7	none	---	none	---	---
	wet	2.1-2.5-6.7	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.5-2.8-5.7	none	---	none	---	---
	wet	2.5-2.8-5.7	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.6-3.3-6.7					
	wet	2.6-3.3-6.7	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
	moist	0.0-0.0-0.7	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-1.0	none	---	none	---	---
	moist	0.0-0.0-1.0	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	4.1-4.9-6.7					
	wet	4.1-4.9-6.7	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	4.1-4.9-6.7	none	---	none	---	---
	wet	4.1-4.9-6.7	6.7-6.7-6.7					

Hangaard (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.0-3.0-4.9	none	---	none	---	---
	wet	2.0-3.0-4.9	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-5.7	none	---	none	---	---
	wet	2.5-3.3-5.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.5-4.1	none	---	none	---	---
	wet	1.6-2.5-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.3-2.5	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.0-0.3-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	1.0-1.6-2.5	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.0-1.6-2.5	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-2.5-4.9	none	---	none	---	---
	wet	1.6-2.5-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.3-5.7	none	---	none	---	---
	wet	2.5-3.3-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.3-2.5-4.9	none	---	none	---	---
	wet	1.3-2.5-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.0-2.1-4.1	none	---	none	---	---
	wet	1.0-2.1-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I25A (continued)

Kratka (1 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

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I26A Hamerly loam, 0 to 2 percent slopes

Hamerly (75 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	3.3-4.9-6.7	none	---	none	---	---
	wet	3.3-4.9-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.7-1.3-3.3	none	---	none	---	---
	wet	0.7-1.3-3.3	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	1.0-1.5-4.1	none	---	none	---	---
	wet	1.0-1.5-4.1	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	1.6-2.0-4.9	none	---	none	---	---
	wet	1.6-2.0-4.9	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.5-3.3-5.4					
August	wet	2.5-3.3-5.4	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.5					
September	moist	0.0-0.0-0.5	3.3-6.7-6.7	none	---	none	---	---
	wet	3.3-6.7-6.7	6.7-6.7-6.7					
October	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.5-4.6-5.7					
November	wet	2.5-4.6-5.7	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.0	2.0-3.9-4.9					
December	wet	2.0-3.9-4.9	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.0	1.6-3.0-4.1					
December	wet	1.6-3.0-4.1	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.0	2.0-3.8-4.9					
December	wet	2.0-3.8-4.9	6.7-6.7-6.7	none	---	none	---	---

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I26A (continued)

Vallers (12 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.3-2.1-3.3	none	---	none	---	---
	wet	1.3-2.1-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.3-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.3-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.7-1.3-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.7-1.3-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	2.0-3.3-4.9	none	---	rare	very brief	0.0-0.3-0.5
	wet	2.0-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.3-1.6-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Foxhome (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.8-5.4-6.7	none	---	none	---	---
	wet	4.8-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	5.2-5.7-6.7	none	---	none	---	---
	wet	5.2-5.7-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.3-2.5-4.9	none	---	none	---	---
	wet	1.3-2.5-4.9	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.0-3.0-5.6	none	---	none	---	---
	wet	2.0-3.0-5.6	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	2.6-3.6-6.2					
July	wet	2.6-3.6-6.2	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.7					
August	moist	0.0-0.0-0.7	3.9-5.4-6.7	none	---	none	---	---
	wet	3.9-5.4-6.7	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-1.0	none	---	none	---	---
	moist	0.0-0.0-1.0	5.4-6.7-6.7					
October	wet	5.4-6.7-6.7	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.3					
November	moist	0.0-0.0-0.3	4.1-4.6-6.7	none	---	none	---	---
	wet	4.1-4.6-6.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.6-3.9-6.7	none	---	none	---	---
	wet	3.6-3.9-6.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.5-3.3-5.7	none	---	none	---	---
	wet	2.5-3.3-5.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.9-4.6-6.2	none	---	none	---	---
	wet	3.9-4.6-6.2	6.7-6.7-6.7					



Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I26A (continued)

Strathcona (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Roliss, depressional (1 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.8-1.6-3.0	none	---	occasional	long	0.0-0.5-1.0
	wet	0.8-1.6-3.0	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.6-2.5-3.3	none	---	occasional	long	0.0-0.5-1.0
	wet	1.6-2.5-3.3	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-1.6	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.6	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.2-0.8-2.5	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.2-0.8-2.5	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.8-1.6-3.0	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-3.0	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	1.6-2.1-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.6-2.1-3.3	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.8-1.6-3.0	none	---	rare	brief	0.0-0.3-0.5
	wet	0.8-1.6-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.2-0.5-1.6	none	---	occasional	long	0.0-0.5-1.0
	wet	0.2-0.5-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.3-0.8-2.0	none	---	occasional	long	0.0-0.5-1.0
	wet	0.3-0.8-2.0	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

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I27A Hamre muck, 0 to 1 percent slopes

Hamre (80 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	occasional	long	0.0-0.5-1.0
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.6-2.5-4.1	none	---	occasional	long	0.0-0.5-1.0
	wet	1.6-2.5-4.1	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-2.5	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.5-1.6	none	---	frequent	brief	0.0-0.5-1.0
	wet	0.0-0.5-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.2-0.8-2.5	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.2-0.8-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.5-1.3-3.0	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-1.3-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.3-0.8-2.5	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.3-0.8-2.5	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.0-0.3-1.6	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.3-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					

Northwood (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	occasional	long	0.0-0.5-1.0
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.6-2.5-4.1	none	---	occasional	long	0.0-0.5-1.0
	wet	1.6-2.5-4.1	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-2.5	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.5-1.6	none	---	frequent	brief	0.0-0.5-1.0
	wet	0.0-0.5-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.2-0.8-2.5	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.2-0.8-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.5-1.3-3.0	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-1.3-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.3-0.8-2.5	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.3-0.8-2.5	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.0-0.3-1.6	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.3-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I27A (continued)

Roliss (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.3-2.1-3.3	none	---	none	---	---
	wet	1.3-2.1-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.3-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.3-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.7-1.3-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.7-1.3-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	2.0-3.3-4.9	none	---	rare	very brief	0.0-0.3-0.5
	wet	2.0-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.3-1.6-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Smiley (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.3-2.1-3.3	none	---	none	---	---
	wet	1.3-2.1-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.3-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.3-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.7-1.3-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.7-1.3-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	2.0-3.3-4.9	none	---	rare	very brief	0.0-0.3-0.5
	wet	2.0-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.3-1.6-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I27A (continued)

Cathro (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.5-1.3-3.3	none	---	occasional	long	0.0-0.3-0.5
	wet	0.5-1.3-3.3	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	occasional	long	0.0-0.3-0.5
	wet	1.3-2.1-4.1	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-2.5	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.0-1.6	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.2-0.8-2.5	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.2-0.8-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.3-1.1-3.0	none	---	rare	brief	0.0-0.3-0.5
	wet	0.3-1.1-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.2-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.2-0.5-2.5	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.0-0.3-1.6	none	---	occasional	long	0.0-0.3-0.5
	wet	0.0-0.3-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.5-0.8-2.5	none	---	occasional	long	0.0-0.3-0.5
	wet	0.5-0.8-2.5	6.7-6.7-6.7					

Kratka (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

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I28A Hangaard sandy loam, 0 to 2 percent slopes

Hangaard (75 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.0-3.0-4.9	none	---	none	---	---
	wet	2.0-3.0-4.9	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-5.7	none	---	none	---	---
	wet	2.5-3.3-5.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.5-4.1	none	---	none	---	---
	wet	1.6-2.5-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.3-2.5	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.0-0.3-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	1.0-1.6-2.5	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.0-1.6-2.5	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-2.5-4.9	none	---	none	---	---
	wet	1.6-2.5-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.3-5.7	none	---	none	---	---
	wet	2.5-3.3-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.3-2.5-4.9	none	---	none	---	---
	wet	1.3-2.5-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.0-2.1-4.1	none	---	none	---	---
	wet	1.0-2.1-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					

Hamar (7 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.0-2.5-4.9	none	---	none	---	---
	wet	2.0-2.5-4.9	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-5.7	none	---	none	---	---
	wet	2.5-3.3-5.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-1.3-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-1.3-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.9-5.7	none	---	none	---	---
	wet	2.5-4.9-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.3-3.0-4.9	none	---	none	---	---
	wet	1.3-3.0-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.0-2.1-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.0-2.1-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	none	---	---
	wet	1.3-2.1-4.1	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I28A (continued)

Syrene (7 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.0-3.0-4.9	none	---	none	---	---
	wet	2.0-3.0-4.9	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-5.7	none	---	none	---	---
	wet	2.5-3.3-5.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.5-4.1	none	---	none	---	---
	wet	1.6-2.5-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.3-2.5	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.0-0.3-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	1.0-1.6-2.5	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.0-1.6-2.5	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-2.5-4.9	none	---	none	---	---
	wet	1.6-2.5-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.3-5.7	none	---	none	---	---
	wet	2.5-3.3-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.3-2.5-4.9	none	---	none	---	---
	wet	1.3-2.5-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.0-2.1-4.1	none	---	none	---	---
	wet	1.0-2.1-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					

Karlsruhe (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.6-3.3-6.2	none	---	none	---	---
	wet	2.6-3.3-6.2	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	3.3-4.1-6.7	none	---	none	---	---
	wet	3.3-4.1-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	2.6-3.3-5.9	none	---	none	---	---
	wet	2.6-3.3-5.9	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.5-2.0-3.3	none	---	none	---	---
	wet	1.5-2.0-3.3	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	1.8-2.5-4.1	none	---	none	---	---
	wet	1.8-2.5-4.1	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	2.5-3.0-4.9	none	---	none	---	---
	wet	2.5-3.0-4.9	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	3.0-3.6-6.7					
	wet	3.0-3.6-6.7	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	4.1-6.7-6.7					
	wet	4.1-6.7-6.7	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.6-4.1-6.7					
October	moist	0.0-0.0-0.0	3.0-4.3-5.7	none	---	none	---	---
	wet	3.0-4.3-5.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.0-2.5-4.9	none	---	none	---	---
	wet	2.0-2.5-4.9	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	2.3-3.0-5.6	none	---	none	---	---
	wet	2.3-3.0-5.6	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I28A (continued)

Rosewood (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.0-2.5-4.9	none	---	none	---	---
	wet	2.0-2.5-4.9	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-5.7	none	---	none	---	---
	wet	2.5-3.3-5.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-1.3-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-1.3-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.9-5.7	none	---	none	---	---
	wet	2.5-4.9-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.3-3.0-4.9	none	---	none	---	---
	wet	1.3-3.0-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.0-2.1-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.0-2.1-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	none	---	---
	wet	1.3-2.1-4.1	6.7-6.7-6.7					

Strandquist (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I28A (continued)

Deerwood (2 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	0.8	1.6	3.3	none	---	occasional	long	0.0	0.5	1.0
	wet	0.8	1.6	3.3	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	1.6	2.5	4.1	none	---	occasional	long	0.0	0.5	1.0
	wet	1.6	2.5	4.1	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	0.0	0.0	2.5	none	---	occasional	long	0.0	0.5	1.0
	wet	0.0	0.0	2.5	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	0.0	0.0	0.8	none	---	frequent	long	0.0	0.5	1.0
	wet	0.0	0.0	0.8	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	0.0	0.0	1.3	none	---	frequent	long	0.0	0.5	1.0
	wet	0.0	0.0	1.3	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	0.0	0.5	1.6	none	---	frequent	brief	0.0	0.5	1.0
	wet	0.0	0.5	1.6	6.7	6.7	6.7							
July	moist	0.0	0.0	0.0	0.2	0.8	2.5	none	---	rare	very brief	0.0	0.3	0.5
	wet	0.2	0.8	2.5	6.7	6.7	6.7							
August	moist	0.0	0.0	0.0	0.8	1.6	3.3	none	---	rare	very brief	0.0	0.3	0.5
	wet	0.8	1.6	3.3	6.7	6.7	6.7							
September	moist	0.0	0.0	0.0	0.5	1.3	3.0	none	---	occasional	brief	0.0	0.3	0.5
	wet	0.5	1.3	3.0	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	0.3	0.8	2.5	none	---	occasional	brief	0.0	0.5	1.0
	wet	0.3	0.8	2.5	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	0.0	0.3	1.6	none	---	occasional	long	0.0	0.5	1.0
	wet	0.0	0.3	1.6	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	0.5	1.3	2.5	none	---	occasional	long	0.0	0.5	1.0
	wet	0.5	1.3	2.5	6.7	6.7	6.7							

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I29A Hattie clay, 0 to 3 percent slopes

Hattie (75 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	4.1	5.7	6.7	none	---	none	---	---	---	---
	wet	4.1	5.7	6.7	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	4.9	6.7	6.7	none	---	none	---	---	---	---
	wet	4.9	6.7	6.7	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	4.1	5.7	6.7	none	---	none	---	---	---	---
	wet	4.1	5.7	6.7	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	1.3	2.1	4.1	none	---	none	---	---	---	---
	wet	1.3	2.1	4.1	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	1.6	2.5	4.1	none	---	none	---	---	---	---
	wet	1.6	2.5	4.1	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	2.0	3.0	5.7	none	---	none	---	---	---	---
	wet	2.0	3.0	5.7	6.7	6.7	6.7							
July	moist	0.0	0.0	0.0	2.5	4.1	6.7	none	---	none	---	---	---	---
	wet	2.5	4.1	6.7	6.7	6.7	6.7							
August	moist	0.0	0.0	0.0	3.3	4.9	6.7	none	---	none	---	---	---	---
	wet	3.3	4.9	6.7	6.7	6.7	6.7							
September	moist	0.0	0.0	0.0	3.3	4.6	6.7	none	---	none	---	---	---	---
	wet	3.3	4.6	6.7	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	2.5	4.1	5.7	none	---	none	---	---	---	---
	wet	2.5	4.1	5.7	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	3.3	4.6	6.7	none	---	none	---	---	---	---
	wet	3.3	4.6	6.7	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	3.6	4.9	6.7	none	---	none	---	---	---	---
	wet	3.6	4.9	6.7	6.7	6.7	6.7							

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I29A (continued)

Clearwater (12 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.8-2.1-4.1	none	---	none	---	---
	wet	0.8-2.1-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.6-2.5-4.9	none	---	none	---	---
	wet	1.6-2.5-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.3-1.3-3.3	none	---	none	---	---
	wet	0.3-1.3-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-1.6	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.3-2.1-4.1	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	occasional	very brief	0.0-0.2-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					

Reis (6 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.0-2.6-4.9	none	---	none	---	---
	wet	2.0-2.6-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.8-2.0-3.9	none	---	none	---	---
	wet	0.8-2.0-3.9	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	none	---	---
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.3-0.8-3.0	none	---	none	---	---
	wet	0.3-0.8-3.0	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-3.6	none	---	none	---	---
	wet	0.8-1.6-3.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-2.8-4.6	none	---	none	---	---
	wet	1.6-2.8-4.6	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.6-5.4	none	---	none	---	---
	wet	2.5-3.6-5.4	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.1-4.6	none	---	none	---	---
	wet	1.6-3.1-4.6	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.1-2.0-4.1	none	---	none	---	---
	wet	1.1-2.0-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.7-1.6-3.3	none	---	none	---	---
	wet	0.7-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.1-2.0-3.8	none	---	none	---	---
	wet	1.1-2.0-3.8	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I29A (continued)

Hattie, very cobbly (5 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	4.1	5.7	6.7	none	---	none	---	---	---	
	wet	4.1	5.7	6.7	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	4.9	6.7	6.7	none	---	none	---	---	---	
	wet	4.9	6.7	6.7	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	4.1	5.7	6.7	none	---	none	---	---	---	
	wet	4.1	5.7	6.7	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	1.3	2.1	4.1	none	---	none	---	---	---	
	wet	1.3	2.1	4.1	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	1.6	2.5	4.1	none	---	none	---	---	---	
	wet	1.6	2.5	4.1	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	2.0	3.0	5.7	none	---	none	---	---	---	
	wet	2.0	3.0	5.7	6.7	6.7	6.7							
July	moist	0.0	0.0	0.0	2.5	4.1	6.7	none	---	none	---	---	---	
	wet	2.5	4.1	6.7	6.7	6.7	6.7							
August	moist	0.0	0.0	0.0	3.3	4.9	6.7	none	---	none	---	---	---	
	wet	3.3	4.9	6.7	6.7	6.7	6.7							
September	moist	0.0	0.0	0.0	3.3	4.6	6.7	none	---	none	---	---	---	
	wet	3.3	4.6	6.7	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	2.5	4.1	5.7	none	---	none	---	---	---	
	wet	2.5	4.1	5.7	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	3.3	4.6	6.7	none	---	none	---	---	---	
	wet	3.3	4.6	6.7	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	3.6	4.9	6.7	none	---	none	---	---	---	
	wet	3.6	4.9	6.7	6.7	6.7	6.7							

Hilaire (2 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	4.6	5.4	6.7	none	---	none	---	---	---	
	wet	4.6	5.4	6.7	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	4.9	5.7	6.7	none	---	none	---	---	---	
	wet	4.9	5.7	6.7	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	3.3	4.6	6.7	none	---	none	---	---	---	
	wet	3.3	4.6	6.7	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	1.6	2.5	4.6	none	---	none	---	---	---	
	wet	1.6	2.5	4.6	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	2.3	3.0	5.2	none	---	none	---	---	---	
	wet	2.3	3.0	5.2	6.7	6.7	6.7							
June	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	
	moist	0.0	0.0	0.3	2.8	3.8	6.2							
July	wet	2.8	3.8	6.2	6.7	6.7	6.7							
	dry	0.0	0.0	0.0	0.0	0.0	0.5	none	---	none	---	---	---	
August	moist	0.0	0.0	0.5	3.8	4.6	6.7							
	wet	3.8	4.6	6.7	6.7	6.7	6.7							
September	dry	0.0	0.0	0.0	0.0	0.0	0.7	none	---	none	---	---	---	
	moist	0.0	0.0	0.7	5.2	6.7	6.7							
October	wet	5.2	6.7	6.7	6.7	6.7	6.7							
	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	
November	moist	0.0	0.0	0.3	3.8	4.1	6.7							
	wet	3.8	4.1	6.7	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	3.3	3.8	6.7	none	---	none	---	---	---	
	wet	3.3	3.8	6.7	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	2.5	3.3	4.9	none	---	none	---	---	---	
	wet	2.5	3.3	4.9	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	3.8	4.1	5.7	none	---	none	---	---	---	
	wet	3.8	4.1	5.7	6.7	6.7	6.7							

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

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I29D Hattie clay, 6 to 18 percent slopes

Hattie (85 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	4.1	5.7	6.7	none	---	none	---	---	---	
	wet	4.1	5.7	6.7	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	4.9	6.7	6.7	none	---	none	---	---	---	
	wet	4.9	6.7	6.7	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	4.1	5.7	6.7	none	---	none	---	---	---	
	wet	4.1	5.7	6.7	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	1.3	2.1	4.1	none	---	none	---	---	---	
	wet	1.3	2.1	4.1	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	1.6	2.5	4.1	none	---	none	---	---	---	
	wet	1.6	2.5	4.1	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	2.0	3.0	5.7	none	---	none	---	---	---	
	wet	2.0	3.0	5.7	6.7	6.7	6.7							
July	moist	0.0	0.0	0.0	2.5	4.1	6.7	none	---	none	---	---	---	
	wet	2.5	4.1	6.7	6.7	6.7	6.7							
August	moist	0.0	0.0	0.0	3.3	4.9	6.7	none	---	none	---	---	---	
	wet	3.3	4.9	6.7	6.7	6.7	6.7							
September	moist	0.0	0.0	0.0	3.3	4.6	6.7	none	---	none	---	---	---	
	wet	3.3	4.6	6.7	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	2.5	4.1	5.7	none	---	none	---	---	---	
	wet	2.5	4.1	5.7	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	3.3	4.6	6.7	none	---	none	---	---	---	
	wet	3.3	4.6	6.7	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	3.6	4.9	6.7	none	---	none	---	---	---	
	wet	3.6	4.9	6.7	6.7	6.7	6.7							

Clearwater (6 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	0.8	2.1	4.1	none	---	none	---	---	---	
	wet	0.8	2.1	4.1	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	1.6	2.5	4.9	none	---	none	---	---	---	
	wet	1.6	2.5	4.9	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	0.3	1.3	3.3	none	---	none	---	---	---	
	wet	0.3	1.3	3.3	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	0.0	0.0	1.6	none	---	occasional	brief	0.0-0.3-0.5		
	wet	0.0	0.0	1.6	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	0.0	0.5	2.5	none	---	occasional	brief	0.0-0.3-0.5		
	wet	0.0	0.5	2.5	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	0.8	1.3	3.3	none	---	occasional	very brief	0.0-0.3-0.5		
	wet	0.8	1.3	3.3	6.7	6.7	6.7							
July	moist	0.0	0.0	0.0	1.3	2.1	4.1	none	---	rare	very brief	0.0-0.2-0.3		
	wet	1.3	2.1	4.1	6.7	6.7	6.7							
August	moist	0.0	0.0	0.0	1.6	3.0	4.9	none	---	rare	very brief	0.0-0.2-0.3		
	wet	1.6	3.0	4.9	6.7	6.7	6.7							
September	moist	0.0	0.0	0.0	1.3	2.5	4.1	none	---	rare	very brief	0.0-0.2-0.3		
	wet	1.3	2.5	4.1	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	0.8	1.6	3.3	none	---	occasional	very brief	0.0-0.2-0.3		
	wet	0.8	1.6	3.3	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	0.5	1.3	2.5	none	---	occasional	brief	0.0-0.3-0.5		
	wet	0.5	1.3	2.5	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	0.8	1.6	3.3	none	---	none	---	---	---	
	wet	0.8	1.6	3.3	6.7	6.7	6.7							

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I29D (continued)

Hattie, level (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.1-5.7-6.7	none	---	none	---	---
	wet	4.1-5.7-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	4.9-6.7-6.7	none	---	none	---	---
	wet	4.9-6.7-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	4.1-5.7-6.7	none	---	none	---	---
	wet	4.1-5.7-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	none	---	---
	wet	1.3-2.1-4.1	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	1.6-2.5-4.1	none	---	none	---	---
	wet	1.6-2.5-4.1	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	2.0-3.0-5.7	none	---	none	---	---
	wet	2.0-3.0-5.7	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	2.5-4.1-6.7	none	---	none	---	---
	wet	2.5-4.1-6.7	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	3.3-4.9-6.7	none	---	none	---	---
	wet	3.3-4.9-6.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.6-4.9-6.7	none	---	none	---	---
	wet	3.6-4.9-6.7	6.7-6.7-6.7					

Boyerlake (4 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.1-5.7-6.7	none	---	none	---	---
	wet	4.1-5.7-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	4.9-6.7-6.7	none	---	none	---	---
	wet	4.9-6.7-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	4.1-5.7-6.7	none	---	none	---	---
	wet	4.1-5.7-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	none	---	---
	wet	1.3-2.1-4.1	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	1.6-2.5-4.1	none	---	none	---	---
	wet	1.6-2.5-4.1	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	2.0-3.0-5.7	none	---	none	---	---
	wet	2.0-3.0-5.7	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	2.5-4.1-6.7	none	---	none	---	---
	wet	2.5-4.1-6.7	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	3.3-4.9-6.7	none	---	none	---	---
	wet	3.3-4.9-6.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.6-4.9-6.7	none	---	none	---	---
	wet	3.6-4.9-6.7	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

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I30A Hedman loam, 0 to 2 percent slopes

Hedman (85 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	1.6	3.0	4.1	none	---	none	---	---	---	---
	wet	1.6	3.0	4.1	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	2.5	3.3	4.9	none	---	none	---	---	---	---
	wet	2.5	3.3	4.9	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	1.3	2.1	3.3	none	---	none	---	---	---	---
	wet	1.3	2.1	3.3	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	0.0	0.5	2.5	none	---	occasional	brief	0.0-0.3	0.0-0.5	
	wet	0.0	0.5	2.5	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	0.3	0.8	3.3	none	---	occasional	brief	0.0-0.3	0.0-0.5	
	wet	0.3	0.8	3.3	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	0.7	1.3	4.1	none	---	occasional	very brief	0.0-0.3	0.0-0.5	
	wet	0.7	1.3	4.1	6.7	6.7	6.7							
July	moist	0.0	0.0	0.0	1.6	3.0	4.9	none	---	none	---	---	---	---
	wet	1.6	3.0	4.9	6.7	6.7	6.7							
August	moist	0.0	0.0	0.0	2.5	3.8	5.7	none	---	none	---	---	---	---
	wet	2.5	3.8	5.7	6.7	6.7	6.7							
September	moist	0.0	0.0	0.0	2.0	3.3	4.9	none	---	rare	very brief	0.0-0.3	0.0-0.5	
	wet	2.0	3.3	4.9	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	1.3	1.6	4.1	none	---	rare	very brief	0.0-0.3	0.0-0.5	
	wet	1.3	1.6	4.1	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	0.8	1.3	3.3	none	---	occasional	brief	0.0-0.3	0.0-0.5	
	wet	0.8	1.3	3.3	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	1.3	2.1	3.8	none	---	none	---	---	---	---
	wet	1.3	2.1	3.8	6.7	6.7	6.7							

Fram (5 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	4.1	5.4	6.7	none	---	none	---	---	---	---
	wet	4.1	5.4	6.7	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	4.9	5.9	6.7	none	---	none	---	---	---	---
	wet	4.9	5.9	6.7	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	3.3	4.9	6.7	none	---	none	---	---	---	---
	wet	3.3	4.9	6.7	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	1.6	2.5	4.1	none	---	none	---	---	---	---
	wet	1.6	2.5	4.1	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	2.1	2.8	4.9	none	---	none	---	---	---	---
	wet	2.1	2.8	4.9	6.7	6.7	6.7							
June	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	---
	moist	0.0	0.0	0.0	2.6	3.1	5.7							
July	wet	2.6	3.1	5.7	6.7	6.7	6.7							
	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	---
August	moist	0.0	0.0	0.3	3.3	5.7	6.7							
	wet	3.3	5.7	6.7	6.7	6.7	6.7							
September	dry	0.0	0.0	0.0	0.0	0.0	0.5	none	---	none	---	---	---	---
	moist	0.0	0.0	0.0	4.9	6.7	6.7							
October	wet	4.9	6.7	6.7	6.7	6.7	6.7							
	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	---
November	moist	0.0	0.0	0.0	3.6	4.9	6.7							
	wet	3.6	4.9	6.7	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	3.0	4.3	5.7	none	---	none	---	---	---	---
	wet	3.0	4.3	5.7	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	2.3	3.3	4.9	none	---	none	---	---	---	---
	wet	2.3	3.3	4.9	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	3.3	4.6	5.7	none	---	none	---	---	---	---
	wet	3.3	4.6	5.7	6.7	6.7	6.7							

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I30A (continued)

Strathcona (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Haug (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	occasional	long	0.0-0.5-1.0
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.6-2.5-4.1	none	---	occasional	long	0.0-0.5-1.0
	wet	1.6-2.5-4.1	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-2.5	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.5-1.6	none	---	frequent	brief	0.0-0.5-1.0
	wet	0.0-0.5-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.2-0.8-2.5	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.2-0.8-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.5-1.3-3.0	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-1.3-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.3-0.8-2.5	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.3-0.8-2.5	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.0-0.3-1.6	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.3-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I30A (continued)

Strandquist (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

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I31A Hedman-Fram complex, 0 to 3 percent slopes

Hedman (50 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.3-2.1-3.3	none	---	none	---	---
	wet	1.3-2.1-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.3-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.3-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.7-1.3-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.7-1.3-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	2.0-3.3-4.9	none	---	rare	very brief	0.0-0.3-0.5
	wet	2.0-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.3-1.6-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I31A (continued)

Fram (40 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.1-5.4-6.7	none	---	none	---	---
	wet	4.1-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	4.9-5.9-6.7	none	---	none	---	---
	wet	4.9-5.9-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.9-6.7	none	---	none	---	---
	wet	3.3-4.9-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.6-2.5-4.1	none	---	none	---	---
	wet	1.6-2.5-4.1	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.1-2.8-4.9	none	---	none	---	---
	wet	2.1-2.8-4.9	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.0	2.6-3.1-5.7					
July	wet	2.6-3.1-5.7	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.3					
August	moist	0.0-0.0-0.3	3.3-5.7-6.7	none	---	none	---	---
	wet	3.3-5.7-6.7	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	4.9-6.7-6.7					
October	wet	4.9-6.7-6.7	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.3					
November	moist	0.0-0.0-0.0	3.6-4.9-6.7	none	---	none	---	---
	wet	3.6-4.9-6.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.0-4.3-5.7	none	---	none	---	---
	wet	3.0-4.3-5.7	6.7-6.7-6.7					

Strathcona (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I31A (continued)

Haug (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	occasional	long	0.0-0.5-1.0
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.6-2.5-4.1	none	---	occasional	long	0.0-0.5-1.0
	wet	1.6-2.5-4.1	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-2.5	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.5-1.6	none	---	frequent	brief	0.0-0.5-1.0
	wet	0.0-0.5-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.2-0.8-2.5	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.2-0.8-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.5-1.3-3.0	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-1.3-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.3-0.8-2.5	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.3-0.8-2.5	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.0-0.3-1.6	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.3-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					

Strandquist (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

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I32A Hilaire fine sandy loam, 0 to 3 percent slopes

Hilaire (75 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	4.6	5.4	6.7	none	---	none	---	---	---	
	wet	4.6	5.4	6.7	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	4.9	5.7	6.7	none	---	none	---	---	---	
	wet	4.9	5.7	6.7	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	3.3	4.6	6.7	none	---	none	---	---	---	
	wet	3.3	4.6	6.7	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	1.6	2.5	4.6	none	---	none	---	---	---	
	wet	1.6	2.5	4.6	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	2.3	3.0	5.2	none	---	none	---	---	---	
	wet	2.3	3.0	5.2	6.7	6.7	6.7							
June	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	
	moist	0.0	0.0	0.3	2.8	3.8	6.2							
July	wet	2.8	3.8	6.2	6.7	6.7	6.7	none	---	none	---	---	---	
	dry	0.0	0.0	0.0	0.0	0.0	0.5							
August	moist	0.0	0.0	0.5	3.8	4.6	6.7	none	---	none	---	---	---	
	wet	3.8	4.6	6.7	6.7	6.7	6.7							
September	dry	0.0	0.0	0.0	0.0	0.0	0.7	none	---	none	---	---	---	
	moist	0.0	0.0	0.0	0.0	0.0	0.3							
October	moist	0.0	0.0	0.3	3.8	4.1	6.7	none	---	none	---	---	---	
	wet	3.8	4.1	6.7	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	3.3	3.8	6.7	none	---	none	---	---	---	
	wet	3.3	3.8	6.7	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	2.5	3.3	4.9	none	---	none	---	---	---	
	wet	2.5	3.3	4.9	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	3.8	4.1	5.7	none	---	none	---	---	---	
	wet	3.8	4.1	5.7	6.7	6.7	6.7							

Espelle (12 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	1.6	2.1	4.1	none	---	none	---	---	---	
	wet	1.6	2.1	4.1	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	2.0	2.6	4.9	none	---	none	---	---	---	
	wet	2.0	2.6	4.9	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	1.5	2.3	4.9	none	---	none	---	---	---	
	wet	1.5	2.3	4.9	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	0.0	0.5	2.5	none	---	occasional	brief	0.0-0.3-0.5	0.0-0.3-0.5	
	wet	0.0	0.5	2.5	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	0.5	0.8	3.3	none	---	occasional	brief	0.0-0.3-0.5	0.0-0.3-0.5	
	wet	0.5	0.8	3.3	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	0.8	1.6	4.1	none	---	occasional	very brief	0.0-0.3-0.5	0.0-0.3-0.5	
	wet	0.8	1.6	4.1	6.7	6.7	6.7							
July	moist	0.0	0.0	0.0	1.6	3.0	4.9	none	---	none	---	---	---	
	wet	1.6	3.0	4.9	6.7	6.7	6.7							
August	moist	0.0	0.0	0.0	2.5	3.8	5.7	none	---	none	---	---	---	
	wet	2.5	3.8	5.7	6.7	6.7	6.7							
September	moist	0.0	0.0	0.0	1.6	3.3	4.9	none	---	rare	very brief	0.0-0.1-0.3	0.0-0.1-0.3	
	wet	1.6	3.3	4.9	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	1.3	2.5	4.1	none	---	rare	very brief	0.0-0.1-0.3	0.0-0.1-0.3	
	wet	1.3	2.5	4.1	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	0.8	1.6	3.3	none	---	rare	very brief	0.0-0.1-0.3	0.0-0.1-0.3	
	wet	0.8	1.6	3.3	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	1.3	2.0	3.9	none	---	none	---	---	---	
	wet	1.3	2.0	3.9	6.7	6.7	6.7							

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I32A (continued)

Huot (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.6-5.4-6.7	none	---	none	---	---
	wet	4.6-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	4.9-5.7-6.7	none	---	none	---	---
	wet	4.9-5.7-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.6-2.5-4.6	none	---	none	---	---
	wet	1.6-2.5-4.6	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.3-3.0-5.2	none	---	none	---	---
	wet	2.3-3.0-5.2	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.8-3.8-6.2					
	wet	2.8-3.8-6.2	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	3.8-4.6-6.7					
	wet	3.8-4.6-6.7	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
	moist	0.0-0.0-0.7	5.2-6.7-6.7					
	wet	5.2-6.7-6.7	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	3.8-4.1-6.7					
	wet	3.8-4.1-6.7	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	3.3-3.8-6.7	none	---	none	---	---
	wet	3.3-3.8-6.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.8-4.1-5.7	none	---	none	---	---
	wet	3.8-4.1-5.7	6.7-6.7-6.7					

Flaming (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.6-5.4-6.7	none	---	none	---	---
	wet	4.6-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	5.2-6.2-6.7	none	---	none	---	---
	wet	5.2-6.2-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.1-6.7	none	---	none	---	---
	wet	3.3-4.1-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	2.1-2.5-6.7	none	---	none	---	---
	wet	2.1-2.5-6.7	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.5-2.8-5.7	none	---	none	---	---
	wet	2.5-2.8-5.7	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.6-3.3-6.7					
	wet	2.6-3.3-6.7	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
	moist	0.0-0.0-0.7	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-1.0	none	---	none	---	---
	moist	0.0-0.0-1.0	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	4.1-4.9-6.7					
	wet	4.1-4.9-6.7	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	4.1-4.9-6.7	none	---	none	---	---
	wet	4.1-4.9-6.7	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I32A (continued)

Foxlake (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.8-2.1-4.1	none	---	none	---	---
	wet	0.8-2.1-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.6-2.5-4.9	none	---	none	---	---
	wet	1.6-2.5-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.3-1.3-3.3	none	---	none	---	---
	wet	0.3-1.3-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-1.6	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.3-2.1-4.1	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	occasional	very brief	0.0-0.2-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					

Wheatville (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	2.5-3.0-5.7	none	---	none	---	---
	wet	2.5-3.0-5.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.7-1.3-3.3	none	---	none	---	---
	wet	0.7-1.3-3.3	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	1.0-1.6-4.1	none	---	none	---	---
	wet	1.0-1.6-4.1	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	1.6-2.5-4.9	none	---	none	---	---
	wet	1.6-2.5-4.9	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	2.5-3.8-6.2	none	---	none	---	---
	wet	2.5-3.8-6.2	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	3.8-6.7-6.7					
September	wet	3.8-6.7-6.7	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.0	2.5-3.8-6.2					
October	wet	2.5-3.8-6.2	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.0	2.0-3.0-5.6					
November	wet	2.0-3.0-5.6	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.0	1.6-2.5-4.9					
December	wet	1.6-2.5-4.9	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.0	2.0-3.3-5.4					
	wet	2.0-3.3-5.4	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I32A (continued)

Thiefriever (1 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.0-2.6-4.9	none	---	none	---	---
	wet	2.0-2.6-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.5-2.3-4.9	none	---	none	---	---
	wet	1.5-2.3-4.9	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.0-3.9	none	---	none	---	---
	wet	1.3-2.0-3.9	6.7-6.7-6.7					

Wyandotte (1 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.0-2.6-4.9	none	---	none	---	---
	wet	2.0-2.6-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.5-2.3-4.1	none	---	none	---	---
	wet	1.5-2.3-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.0-3.9	none	---	none	---	---
	wet	1.3-2.0-3.9	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

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I33A Hilaire loamy fine sand, 0 to 3 percent slopes

Hilaire (75 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	4.6	5.4	6.7	none	---	none	---	---	---	
	wet	4.6	5.4	6.7	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	4.9	5.7	6.7	none	---	none	---	---	---	
	wet	4.9	5.7	6.7	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	3.3	4.6	6.7	none	---	none	---	---	---	
	wet	3.3	4.6	6.7	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	1.6	2.5	4.6	none	---	none	---	---	---	
	wet	1.6	2.5	4.6	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	2.3	3.0	5.2	none	---	none	---	---	---	
	wet	2.3	3.0	5.2	6.7	6.7	6.7							
June	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	
	moist	0.0	0.0	0.3	2.8	3.8	6.2							
July	wet	2.8	3.8	6.2	6.7	6.7	6.7	none	---	none	---	---	---	
	dry	0.0	0.0	0.0	0.0	0.0	0.5							
August	moist	0.0	0.0	0.5	3.8	4.6	6.7	none	---	none	---	---	---	
	wet	3.8	4.6	6.7	6.7	6.7	6.7							
September	dry	0.0	0.0	0.0	0.0	0.0	0.7	none	---	none	---	---	---	
	moist	0.0	0.0	0.7	5.2	6.7	6.7							
October	wet	5.2	6.7	6.7	6.7	6.7	6.7	none	---	none	---	---	---	
	dry	0.0	0.0	0.0	0.0	0.0	0.5							
November	moist	0.0	0.0	0.5	3.8	4.1	6.7	none	---	none	---	---	---	
	wet	3.8	4.1	6.7	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	3.3	3.8	6.7	none	---	none	---	---	---	
	wet	3.3	3.8	6.7	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	2.5	3.3	4.9	none	---	none	---	---	---	
	wet	2.5	3.3	4.9	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	3.8	4.1	5.7	none	---	none	---	---	---	
	wet	3.8	4.1	5.7	6.7	6.7	6.7							

Espelie (12 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	1.6	2.1	4.1	none	---	none	---	---	---	
	wet	1.6	2.1	4.1	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	2.0	2.6	4.9	none	---	none	---	---	---	
	wet	2.0	2.6	4.9	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	1.5	2.3	4.9	none	---	none	---	---	---	
	wet	1.5	2.3	4.9	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	0.0	0.5	2.5	none	---	occasional	brief	0.0-0.3-0.5	0.0-0.3-0.5	
	wet	0.0	0.5	2.5	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	0.5	0.8	3.3	none	---	occasional	brief	0.0-0.3-0.5	0.0-0.3-0.5	
	wet	0.5	0.8	3.3	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	0.8	1.6	4.1	none	---	occasional	very brief	0.0-0.3-0.5	0.0-0.3-0.5	
	wet	0.8	1.6	4.1	6.7	6.7	6.7							
July	moist	0.0	0.0	0.0	1.6	3.0	4.9	none	---	none	---	---	---	
	wet	1.6	3.0	4.9	6.7	6.7	6.7							
August	moist	0.0	0.0	0.0	2.5	3.8	5.7	none	---	none	---	---	---	
	wet	2.5	3.8	5.7	6.7	6.7	6.7							
September	moist	0.0	0.0	0.0	1.6	3.3	4.9	none	---	rare	very brief	0.0-0.1-0.3	0.0-0.1-0.3	
	wet	1.6	3.3	4.9	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	1.3	2.5	4.1	none	---	rare	very brief	0.0-0.1-0.3	0.0-0.1-0.3	
	wet	1.3	2.5	4.1	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	0.8	1.6	3.3	none	---	rare	very brief	0.0-0.1-0.3	0.0-0.1-0.3	
	wet	0.8	1.6	3.3	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	1.3	2.0	3.9	none	---	none	---	---	---	
	wet	1.3	2.0	3.9	6.7	6.7	6.7							

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I33A (continued)

Huot (5 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	4.6	5.4	6.7	none	---	none	---	---	---	---
	wet	4.6	5.4	6.7	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	4.9	5.7	6.7	none	---	none	---	---	---	---
	wet	4.9	5.7	6.7	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	3.3	4.6	6.7	none	---	none	---	---	---	---
	wet	3.3	4.6	6.7	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	1.6	2.5	4.6	none	---	none	---	---	---	---
	wet	1.6	2.5	4.6	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	2.3	3.0	5.2	none	---	none	---	---	---	---
	wet	2.3	3.0	5.2	6.7	6.7	6.7							
June	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	---
	moist	0.0	0.0	0.3	2.8	3.8	6.2							
	wet	2.8	3.8	6.2	6.7	6.7	6.7							
July	dry	0.0	0.0	0.0	0.0	0.0	0.5	none	---	none	---	---	---	---
	moist	0.0	0.0	0.5	3.8	4.6	6.7							
	wet	3.8	4.6	6.7	6.7	6.7	6.7							
August	dry	0.0	0.0	0.0	0.0	0.0	0.7	none	---	none	---	---	---	---
	moist	0.0	0.0	0.7	5.2	6.7	6.7							
	wet	5.2	6.7	6.7	6.7	6.7	6.7							
September	dry	0.0	0.0	0.0	0.0	0.0	0.5	none	---	none	---	---	---	---
	moist	0.0	0.0	0.5	3.8	4.1	6.7							
	wet	3.8	4.1	6.7	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	3.3	3.8	6.7	none	---	none	---	---	---	---
	wet	3.3	3.8	6.7	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	2.5	3.3	4.9	none	---	none	---	---	---	---
	wet	2.5	3.3	4.9	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	3.8	4.1	5.7	none	---	none	---	---	---	---
	wet	3.8	4.1	5.7	6.7	6.7	6.7							

Flaming (2 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	4.6	5.4	6.7	none	---	none	---	---	---	---
	wet	4.6	5.4	6.7	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	5.2	6.2	6.7	none	---	none	---	---	---	---
	wet	5.2	6.2	6.7	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	3.3	4.1	6.7	none	---	none	---	---	---	---
	wet	3.3	4.1	6.7	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	2.1	2.5	6.7	none	---	none	---	---	---	---
	wet	2.1	2.5	6.7	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	2.5	2.8	5.7	none	---	none	---	---	---	---
	wet	2.5	2.8	5.7	6.7	6.7	6.7							
June	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	---
	moist	0.0	0.0	0.3	2.6	3.3	6.7							
	wet	2.6	3.3	6.7	6.7	6.7	6.7							
July	dry	0.0	0.0	0.0	0.0	0.0	0.7	none	---	none	---	---	---	---
	moist	0.0	0.0	0.7	6.7	6.7	6.7							
August	dry	0.0	0.0	0.0	0.0	0.0	1.0	none	---	none	---	---	---	---
	moist	0.0	0.0	1.0	6.7	6.7	6.7							
September	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	---
	moist	0.0	0.0	0.3	4.1	4.9	6.7							
	wet	4.1	4.9	6.7	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	3.3	4.6	6.7	none	---	none	---	---	---	---
	wet	3.3	4.6	6.7	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	2.5	4.1	5.7	none	---	none	---	---	---	---
	wet	2.5	4.1	5.7	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	4.1	4.9	6.7	none	---	none	---	---	---	---
	wet	4.1	4.9	6.7	6.7	6.7	6.7							

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I33A (continued)

Foxlake (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.8-2.1-4.1	none	---	none	---	---
	wet	0.8-2.1-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.6-2.5-4.9	none	---	none	---	---
	wet	1.6-2.5-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.3-1.3-3.3	none	---	none	---	---
	wet	0.3-1.3-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-1.6	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.3-2.1-4.1	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	occasional	very brief	0.0-0.2-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					

Wheatville (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	2.5-3.0-5.7	none	---	none	---	---
	wet	2.5-3.0-5.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.7-1.3-3.3	none	---	none	---	---
	wet	0.7-1.3-3.3	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	1.0-1.6-4.1	none	---	none	---	---
	wet	1.0-1.6-4.1	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	1.6-2.5-4.9	none	---	none	---	---
	wet	1.6-2.5-4.9	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	2.5-3.8-6.2	none	---	none	---	---
	wet	2.5-3.8-6.2	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	3.8-6.7-6.7					
September	wet	3.8-6.7-6.7	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.0	2.5-3.8-6.2					
October	wet	2.5-3.8-6.2	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.0	2.0-3.0-5.6					
November	wet	2.0-3.0-5.6	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.0	1.6-2.5-4.9					
December	wet	1.6-2.5-4.9	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.0	2.0-3.3-5.4					
	wet	2.0-3.3-5.4	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I33A (continued)

Thiefriever (1 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.0-2.6-4.9	none	---	none	---	---
	wet	2.0-2.6-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.5-2.3-4.9	none	---	none	---	---
	wet	1.5-2.3-4.9	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.0-3.9	none	---	none	---	---
	wet	1.3-2.0-3.9	6.7-6.7-6.7					

Wyandotte (1 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.0-2.6-4.9	none	---	none	---	---
	wet	2.0-2.6-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.5-2.3-4.1	none	---	none	---	---
	wet	1.5-2.3-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.0-3.9	none	---	none	---	---
	wet	1.3-2.0-3.9	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

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I34A Huot fine sandy loam, 0 to 3 percent slopes

Huot (75 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	4.6	5.4	6.7	none	---	none	---	---	---	
	wet	4.6	5.4	6.7	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	4.9	5.7	6.7	none	---	none	---	---	---	
	wet	4.9	5.7	6.7	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	3.3	4.6	6.7	none	---	none	---	---	---	
	wet	3.3	4.6	6.7	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	1.6	2.5	4.6	none	---	none	---	---	---	
	wet	1.6	2.5	4.6	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	2.3	3.0	5.2	none	---	none	---	---	---	
	wet	2.3	3.0	5.2	6.7	6.7	6.7							
June	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	
	moist	0.0	0.0	0.3	2.8	3.8	6.2							
July	wet	2.8	3.8	6.2	6.7	6.7	6.7	none	---	none	---	---	---	
	dry	0.0	0.0	0.0	0.0	0.0	0.5							
August	moist	0.0	0.0	0.5	3.8	4.6	6.7	none	---	none	---	---	---	
	wet	3.8	4.6	6.7	6.7	6.7	6.7							
September	dry	0.0	0.0	0.0	0.0	0.0	0.5	none	---	none	---	---	---	
	moist	0.0	0.0	0.5	3.8	4.1	6.7							
October	wet	3.8	4.1	6.7	6.7	6.7	6.7	none	---	none	---	---	---	
	moist	0.0	0.0	0.0	3.3	3.8	6.7							
November	wet	3.3	3.8	6.7	6.7	6.7	6.7	none	---	none	---	---	---	
	moist	0.0	0.0	0.0	2.5	3.3	4.9							
December	wet	2.5	3.3	4.9	6.7	6.7	6.7	none	---	none	---	---	---	
	moist	0.0	0.0	0.0	3.8	4.1	5.7							
	wet	3.8	4.1	5.7	6.7	6.7	6.7							

Thiefriever (12 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	1.6	2.1	4.1	none	---	none	---	---	---	
	wet	1.6	2.1	4.1	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	2.0	2.6	4.9	none	---	none	---	---	---	
	wet	2.0	2.6	4.9	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	1.5	2.3	4.9	none	---	none	---	---	---	
	wet	1.5	2.3	4.9	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	0.0	0.5	2.5	none	---	occasional	brief	0.0-0.3-0.5	0.0-0.3-0.5	
	wet	0.0	0.5	2.5	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	0.5	0.8	3.3	none	---	occasional	brief	0.0-0.3-0.5	0.0-0.3-0.5	
	wet	0.5	0.8	3.3	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	0.8	1.6	4.1	none	---	occasional	very brief	0.0-0.3-0.5	0.0-0.3-0.5	
	wet	0.8	1.6	4.1	6.7	6.7	6.7							
July	moist	0.0	0.0	0.0	1.6	3.0	4.9	none	---	none	---	---	---	
	wet	1.6	3.0	4.9	6.7	6.7	6.7							
August	moist	0.0	0.0	0.0	2.5	3.8	5.7	none	---	none	---	---	---	
	wet	2.5	3.8	5.7	6.7	6.7	6.7							
September	moist	0.0	0.0	0.0	1.6	3.3	4.9	none	---	rare	very brief	0.0-0.1-0.3	0.0-0.1-0.3	
	wet	1.6	3.3	4.9	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	1.3	2.5	4.1	none	---	rare	very brief	0.0-0.1-0.3	0.0-0.1-0.3	
	wet	1.3	2.5	4.1	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	0.8	1.6	3.3	none	---	rare	very brief	0.0-0.1-0.3	0.0-0.1-0.3	
	wet	0.8	1.6	3.3	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	1.3	2.0	3.9	none	---	none	---	---	---	
	wet	1.3	2.0	3.9	6.7	6.7	6.7							

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I34A (continued)

Hilaire (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.6-5.4-6.7	none	---	none	---	---
	wet	4.6-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	4.9-5.7-6.7	none	---	none	---	---
	wet	4.9-5.7-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.6-2.5-4.6	none	---	none	---	---
	wet	1.6-2.5-4.6	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.3-3.0-5.2	none	---	none	---	---
	wet	2.3-3.0-5.2	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.8-3.8-6.2					
	wet	2.8-3.8-6.2	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	3.8-4.6-6.7					
	wet	3.8-4.6-6.7	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
	moist	0.0-0.0-0.7	5.2-6.7-6.7					
	wet	5.2-6.7-6.7	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	3.8-4.1-6.7					
	wet	3.8-4.1-6.7	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	3.3-3.8-6.7	none	---	none	---	---
	wet	3.3-3.8-6.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.8-4.1-5.7	none	---	none	---	---
	wet	3.8-4.1-5.7	6.7-6.7-6.7					

Flaming (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.6-5.4-6.7	none	---	none	---	---
	wet	4.6-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	5.2-6.2-6.7	none	---	none	---	---
	wet	5.2-6.2-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.1-6.7	none	---	none	---	---
	wet	3.3-4.1-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	2.1-2.5-6.7	none	---	none	---	---
	wet	2.1-2.5-6.7	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.5-2.8-5.7	none	---	none	---	---
	wet	2.5-2.8-5.7	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.6-3.3-6.7					
	wet	2.6-3.3-6.7	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
	moist	0.0-0.0-0.7	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-1.0	none	---	none	---	---
	moist	0.0-0.0-1.0	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	4.1-4.9-6.7					
	wet	4.1-4.9-6.7	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	4.1-4.9-6.7	none	---	none	---	---
	wet	4.1-4.9-6.7	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I34A (continued)

Foxlake (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.8-2.1-4.1	none	---	none	---	---
	wet	0.8-2.1-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.6-2.5-4.9	none	---	none	---	---
	wet	1.6-2.5-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.3-1.3-3.3	none	---	none	---	---
	wet	0.3-1.3-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-1.6	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.3-2.1-4.1	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	occasional	very brief	0.0-0.2-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					

Ulen (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.6-3.3-5.9	none	---	none	---	---
	wet	2.6-3.3-5.9	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	3.3-4.1-6.7	none	---	none	---	---
	wet	3.3-4.1-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	2.6-3.3-5.7	none	---	none	---	---
	wet	2.6-3.3-5.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.5-2.0-3.3	none	---	none	---	---
	wet	1.5-2.0-3.3	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.0-2.5-4.1	none	---	none	---	---
	wet	2.0-2.5-4.1	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.5-3.0-4.9					
	wet	2.5-3.0-4.9	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	3.0-4.9-6.2					
	wet	3.0-4.9-6.2	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
	moist	0.0-0.0-0.7	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.6-4.9-6.7					
	wet	2.6-4.9-6.7	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	2.3-3.0-5.7	none	---	none	---	---
	wet	2.3-3.0-5.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.0-2.5-4.9	none	---	none	---	---
	wet	2.0-2.5-4.9	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	2.3-3.0-5.2	none	---	none	---	---
	wet	2.3-3.0-5.2	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

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I35A Karlsruhe sandy loam, 0 to 3 percent slopes

Karlsruhe (70 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	2.6	3.3	6.2	none	---	none	---	---	---	
	wet	2.6	3.3	6.2	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	3.3	4.1	6.7	none	---	none	---	---	---	
	wet	3.3	4.1	6.7	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	2.6	3.3	5.9	none	---	none	---	---	---	
	wet	2.6	3.3	5.9	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	1.5	2.0	3.3	none	---	none	---	---	---	
	wet	1.5	2.0	3.3	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	1.8	2.5	4.1	none	---	none	---	---	---	
	wet	1.8	2.5	4.1	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	2.5	3.0	4.9	none	---	none	---	---	---	
	wet	2.5	3.0	4.9	6.7	6.7	6.7							
July	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	
	moist	0.0	0.0	0.3	3.0	3.6	6.7							
August	wet	3.0	3.6	6.7	6.7	6.7	6.7							
	dry	0.0	0.0	0.0	0.0	0.0	0.5	none	---	none	---	---	---	
September	moist	0.0	0.0	0.5	4.1	6.7	6.7							
	wet	4.1	6.7	6.7	6.7	6.7	6.7							
October	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	
	moist	0.0	0.0	0.3	2.6	4.1	6.7							
November	wet	2.6	4.1	6.7	6.7	6.7	6.7							
	moist	0.0	0.0	0.0	3.0	4.3	5.7	none	---	none	---	---	---	
December	wet	3.0	4.3	5.7	6.7	6.7	6.7							
	moist	0.0	0.0	0.0	2.0	2.5	4.9	none	---	none	---	---	---	
December	wet	2.0	2.5	4.9	6.7	6.7	6.7							
	moist	0.0	0.0	0.0	2.3	3.0	5.6	none	---	none	---	---	---	
December	wet	2.3	3.0	5.6	6.7	6.7	6.7							

Syrene (10 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	2.0	3.0	4.9	none	---	none	---	---	---	
	wet	2.0	3.0	4.9	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	2.5	3.3	5.7	none	---	none	---	---	---	
	wet	2.5	3.3	5.7	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	1.6	2.5	4.1	none	---	none	---	---	---	
	wet	1.6	2.5	4.1	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	0.0	0.3	2.5	none	---	occasional	very brief	0.0-0.3-0.5		
	wet	0.0	0.3	2.5	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	0.5	0.8	3.3	none	---	rare	very brief	0.0-0.3-0.5		
	wet	0.5	0.8	3.3	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	1.0	1.6	2.5	none	---	rare	very brief	0.0-0.1-0.3		
	wet	1.0	1.6	2.5	6.7	6.7	6.7							
July	moist	0.0	0.0	0.0	1.6	2.5	4.9	none	---	none	---	---	---	
	wet	1.6	2.5	4.9	6.7	6.7	6.7							
August	moist	0.0	0.0	0.0	2.5	3.3	5.7	none	---	none	---	---	---	
	wet	2.5	3.3	5.7	6.7	6.7	6.7							
September	moist	0.0	0.0	0.0	1.3	2.5	4.9	none	---	none	---	---	---	
	wet	1.3	2.5	4.9	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	1.0	2.1	4.1	none	---	none	---	---	---	
	wet	1.0	2.1	4.1	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	0.8	1.6	3.3	none	---	none	---	---	---	
	wet	0.8	1.6	3.3	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	1.6	2.1	4.1	none	---	none	---	---	---	
	wet	1.6	2.1	4.1	6.7	6.7	6.7							

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I35A (continued)

Ulen (10 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.6-3.3-5.9	none	---	none	---	---
	wet	2.6-3.3-5.9	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	3.3-4.1-6.7	none	---	none	---	---
	wet	3.3-4.1-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	2.6-3.3-5.7	none	---	none	---	---
	wet	2.6-3.3-5.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.5-2.0-3.3	none	---	none	---	---
	wet	1.5-2.0-3.3	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.0-2.5-4.1	none	---	none	---	---
	wet	2.0-2.5-4.1	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.5-3.0-4.9					
July	wet	2.5-3.0-4.9	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.3-0.5					
August	moist	0.0-0.3-0.5	3.0-4.9-6.2	none	---	none	---	---
	wet	3.0-4.9-6.2	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	2.6-4.9-6.7					
October	wet	2.6-4.9-6.7	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.0	2.3-3.0-5.7					
November	wet	2.3-3.0-5.7	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.0	2.0-2.5-4.9					
December	wet	2.0-2.5-4.9	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.0	2.3-3.0-5.2					
	wet	2.3-3.0-5.2	6.7-6.7-6.7					

Radium (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.9-5.4-6.7	none	---	none	---	---
	wet	4.9-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	5.7-6.2-6.7	none	---	none	---	---
	wet	5.7-6.2-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.1-6.7	none	---	none	---	---
	wet	3.3-4.1-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	2.1-3.0-4.9	none	---	none	---	---
	wet	2.1-3.0-4.9	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.6-3.8-5.7	none	---	none	---	---
	wet	2.6-3.8-5.7	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	3.3-4.4-6.7					
July	wet	3.3-4.4-6.7	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.7					
August	moist	0.0-0.0-0.7	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-1.0					
September	moist	0.0-0.0-1.0	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.7					
October	moist	0.0-0.0-0.7	4.1-4.9-6.7	none	---	none	---	---
	wet	4.1-4.9-6.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
	moist	0.0-0.0-0.0	4.1-4.9-6.7					
	wet	4.1-4.9-6.7	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I35A (continued)

Rosewood (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.0-2.5-4.9	none	---	none	---	---
	wet	2.0-2.5-4.9	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-5.7	none	---	none	---	---
	wet	2.5-3.3-5.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-1.3-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-1.3-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.9-5.7	none	---	none	---	---
	wet	2.5-4.9-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.3-3.0-4.9	none	---	none	---	---
	wet	1.3-3.0-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.0-2.1-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.0-2.1-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	none	---	---
	wet	1.3-2.1-4.1	6.7-6.7-6.7					

Sandberg (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
February	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
March	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
April	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
May	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
July	moist	0.0-0.0-0.3	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.7					
August	moist	0.0-0.0-0.7	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-1.0					
September	moist	0.0-0.0-1.0	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-1.0					
October	moist	0.0-0.0-1.0	6.7-6.7-6.7	none	---	none	---	---
November	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
December	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

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I36A Kittson loam, 0 to 3 percent slopes

Kittson (70 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.1-5.4-6.7	none	---	none	---	---
	wet	4.1-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	4.9-5.9-6.7	none	---	none	---	---
	wet	4.9-5.9-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.9-6.7	none	---	none	---	---
	wet	3.3-4.9-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.6-2.5-4.1	none	---	none	---	---
	wet	1.6-2.5-4.1	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.1-2.8-4.9	none	---	none	---	---
	wet	2.1-2.8-4.9	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.6-3.1-5.7					
July	wet	2.6-3.1-5.7	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.3					
August	moist	0.0-0.0-0.3	3.3-5.7-6.7	none	---	none	---	---
	wet	3.3-5.7-6.7	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	4.9-6.7-6.7					
October	wet	4.9-6.7-6.7	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.3					
November	moist	0.0-0.0-0.3	3.6-4.9-6.7	none	---	none	---	---
	wet	3.6-4.9-6.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.0-4.3-5.7	none	---	none	---	---
	wet	3.0-4.3-5.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	2.3-3.3-4.9	none	---	none	---	---
	wet	2.3-3.3-4.9	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.3-4.6-5.7	none	---	none	---	---
	wet	3.3-4.6-5.7	6.7-6.7-6.7					

Roliss (12 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.3-2.1-3.3	none	---	none	---	---
	wet	1.3-2.1-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.3-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.3-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.7-1.3-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.7-1.3-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	2.0-3.3-4.9	none	---	rare	very brief	0.0-0.3-0.5
	wet	2.0-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.3-1.6-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I36A (continued)

Hamerly (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	3.3-4.9-6.7	none	---	none	---	---
	wet	3.3-4.9-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.7-1.3-3.3	none	---	none	---	---
	wet	0.7-1.3-3.3	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	1.0-1.5-4.1	none	---	none	---	---
	wet	1.0-1.5-4.1	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	1.6-2.0-4.9	none	---	none	---	---
	wet	1.6-2.0-4.9	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.5-3.3-5.4					
	wet	2.5-3.3-5.4	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	3.3-6.7-6.7					
	wet	3.3-6.7-6.7	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.5-4.6-5.7					
	wet	2.5-4.6-5.7	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	2.0-3.9-4.9	none	---	none	---	---
	wet	2.0-3.9-4.9	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	2.0-3.8-4.9	none	---	none	---	---
	wet	2.0-3.8-4.9	6.7-6.7-6.7					

Kratka (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I36A (continued)

Grimstad (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	2.5-3.0-5.7	none	---	none	---	---
	wet	2.5-3.0-5.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.8-1.5-3.3	none	---	none	---	---
	wet	0.8-1.5-3.3	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	1.1-1.8-4.1	none	---	none	---	---
	wet	1.1-1.8-4.1	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.5-5.7-6.2					
	wet	2.5-5.7-6.2	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.5-3.8-6.7					
	wet	2.5-3.8-6.7	6.7-6.7-6.7					
	October	moist	0.0-0.0-0.0	2.0-3.0-5.6	none	---	none	---
	wet	2.0-3.0-5.6	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	1.6-2.5-4.9	none	---	none	---	---
	wet	1.6-2.5-4.9	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	2.0-3.3-5.4	none	---	none	---	---
	wet	2.0-3.3-5.4	6.7-6.7-6.7					

Strandquist (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I36A (continued)

Foxhome (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.8-5.4-6.7	none	---	none	---	---
	wet	4.8-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	5.2-5.7-6.7	none	---	none	---	---
	wet	5.2-5.7-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.3-2.5-4.9	none	---	none	---	---
	wet	1.3-2.5-4.9	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.0-3.0-5.6	none	---	none	---	---
	wet	2.0-3.0-5.6	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	2.6-3.6-6.2					
July	wet	2.6-3.6-6.2	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.7					
August	moist	0.0-0.0-0.7	3.9-5.4-6.7	none	---	none	---	---
	wet	3.9-5.4-6.7	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-1.0	none	---	none	---	---
	moist	0.0-0.0-1.0	5.4-6.7-6.7					
October	wet	5.4-6.7-6.7	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.3	4.1-4.6-6.7					
November	wet	4.1-4.6-6.7	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.0	3.6-3.9-6.7					
December	wet	3.6-3.9-6.7	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.0	2.5-3.3-5.7					
December	wet	2.5-3.3-5.7	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.0	3.9-4.6-6.2					
December	wet	3.9-4.6-6.2	6.7-6.7-6.7	none	---	none	---	---

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

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I37A Kratka and Strathcona soils, depressional, 0 to 1 percent slopes

Kratka, depressional (45 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.0-1.6-3.0	none	---	occasional	long	0.0-0.5-1.0
	wet	1.0-1.6-3.0	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.6-2.5-3.6	none	---	occasional	long	0.0-0.5-1.0
	wet	1.6-2.5-3.6	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.0	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-2.0	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-1.0	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.0	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-2.0	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-2.0	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.2-0.8-2.5	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.2-0.8-2.5	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.7-1.6-3.0	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.7-1.6-3.0	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	1.6-2.5-3.6	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.6-2.5-3.6	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.0-1.6-3.0	none	---	rare	brief	0.0-0.3-0.5
	wet	1.0-1.6-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.7-1.3-2.6	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.7-1.3-2.6	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.3-0.8-1.6	none	---	occasional	long	0.0-0.5-1.0
	wet	0.3-0.8-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.7-1.3-2.3	none	---	occasional	long	0.0-0.5-1.0
	wet	0.7-1.3-2.3	6.7-6.7-6.7					

Strathcona, depressional (45 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.0-1.6-3.0	none	---	occasional	long	0.0-0.5-1.0
	wet	1.0-1.6-3.0	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.6-2.5-3.3	none	---	occasional	long	0.0-0.5-1.0
	wet	1.6-2.5-3.3	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.0	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-2.0	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-1.0	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.0	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-2.0	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-2.0	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.2-0.8-2.5	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.2-0.8-2.5	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.7-1.6-3.0	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.7-1.6-3.0	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	1.6-2.5-3.6	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.6-2.5-3.6	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.0-1.6-3.0	none	---	rare	brief	0.0-0.3-0.5
	wet	1.0-1.6-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.7-1.3-2.6	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.7-1.3-2.6	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.3-0.8-1.6	none	---	occasional	long	0.0-0.5-1.0
	wet	0.3-0.8-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.7-1.3-2.3	none	---	occasional	long	0.0-0.5-1.0
	wet	0.7-1.3-2.3	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I37A (continued)

Northwood (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	occasional	long	0.0-0.5-1.0
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.6-2.5-4.1	none	---	occasional	long	0.0-0.5-1.0
	wet	1.6-2.5-4.1	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-2.5	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.5-1.6	none	---	frequent	brief	0.0-0.5-1.0
	wet	0.0-0.5-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.2-0.8-2.5	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.2-0.8-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.5-1.3-3.0	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-1.3-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.3-0.8-2.5	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.3-0.8-2.5	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.0-0.3-1.6	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.3-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					

Kratka (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I37A (continued)

Strathcona (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Roliss (1 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.3-2.1-3.3	none	---	none	---	---
	wet	1.3-2.1-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.3-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.3-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.7-1.3-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.7-1.3-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	2.0-3.3-4.9	none	---	rare	very brief	0.0-0.3-0.5
	wet	2.0-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.3-1.6-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

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I38A Kratka fine sandy loam, 0 to 2 percent slopes

Kratka (70 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Smiley (7 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.3-2.1-3.3	none	---	none	---	---
	wet	1.3-2.1-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.3-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.3-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.7-1.3-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.7-1.3-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	2.0-3.3-4.9	none	---	rare	very brief	0.0-0.3-0.5
	wet	2.0-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.3-1.6-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I38A (continued)

Foldahl (5 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	4.6	5.4	6.7	none	---	none	---	---	---	
	wet	4.6	5.4	6.7	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	4.9	5.7	6.7	none	---	none	---	---	---	
	wet	4.9	5.7	6.7	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	3.3	4.6	6.7	none	---	none	---	---	---	
	wet	3.3	4.6	6.7	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	1.3	2.5	4.6	none	---	none	---	---	---	
	wet	1.3	2.5	4.6	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	2.0	3.1	5.2	none	---	none	---	---	---	
	wet	2.0	3.1	5.2	6.7	6.7	6.7							
June	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	
	moist	0.0	0.0	0.3	2.6	3.8	6.2							
	wet	2.6	3.8	6.2	6.7	6.7	6.7							
July	dry	0.0	0.0	0.0	0.0	0.0	0.5	none	---	none	---	---	---	
	moist	0.0	0.0	0.5	3.8	4.9	6.7							
	wet	3.8	4.9	6.7	6.7	6.7	6.7							
August	dry	0.0	0.0	0.0	0.0	0.0	0.7	none	---	none	---	---	---	
	moist	0.0	0.0	0.7	5.2	6.7	6.7							
	wet	5.2	6.7	6.7	6.7	6.7	6.7							
September	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	
	moist	0.0	0.0	0.3	3.8	4.1	6.7							
	wet	3.8	4.1	6.7	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	3.3	3.8	6.7	none	---	none	---	---	---	
	wet	3.3	3.8	6.7	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	2.5	3.3	5.6	none	---	none	---	---	---	
	wet	2.5	3.3	5.6	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	3.8	4.1	6.2	none	---	none	---	---	---	
	wet	3.8	4.1	6.2	6.7	6.7	6.7							

Kratka, very cobbly (5 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	1.6	3.0	4.1	none	---	none	---	---	---	
	wet	1.6	3.0	4.1	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	2.5	3.3	4.9	none	---	none	---	---	---	
	wet	2.5	3.3	4.9	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	1.6	2.1	4.1	none	---	none	---	---	---	
	wet	1.6	2.1	4.1	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	0.0	0.5	2.5	none	---	occasional	brief	0.0-0.3-0.5		
	wet	0.0	0.5	2.5	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	0.5	0.8	3.3	none	---	occasional	very brief	0.0-0.3-0.5		
	wet	0.5	0.8	3.3	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	0.8	1.6	4.1	none	---	rare	very brief	0.0-0.1-0.3		
	wet	0.8	1.6	4.1	6.7	6.7	6.7							
July	moist	0.0	0.0	0.0	1.6	3.3	4.9	none	---	none	---	---	---	
	wet	1.6	3.3	4.9	6.7	6.7	6.7							
August	moist	0.0	0.0	0.0	2.5	4.1	5.7	none	---	none	---	---	---	
	wet	2.5	4.1	5.7	6.7	6.7	6.7							
September	moist	0.0	0.0	0.0	1.6	3.3	4.9	none	---	none	---	---	---	
	wet	1.6	3.3	4.9	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	1.3	2.5	4.1	none	---	rare	very brief	0.0-0.1-0.3		
	wet	1.3	2.5	4.1	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	0.8	1.6	3.3	none	---	rare	very brief	0.0-0.1-0.3		
	wet	0.8	1.6	3.3	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	1.3	2.1	3.8	none	---	none	---	---	---	
	wet	1.3	2.1	3.8	6.7	6.7	6.7							

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I38A (continued)

Strathcona (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Kratka, depressional (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.0-1.6-3.0	none	---	occasional	long	0.0-0.5-1.0
	wet	1.0-1.6-3.0	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.6-2.5-3.6	none	---	occasional	long	0.0-0.5-1.0
	wet	1.6-2.5-3.6	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.0	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-2.0	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-1.0	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.0	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-2.0	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-2.0	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.2-0.8-2.5	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.2-0.8-2.5	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.7-1.6-3.0	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.7-1.6-3.0	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	1.6-2.5-3.6	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.6-2.5-3.6	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.0-1.6-3.0	none	---	rare	brief	0.0-0.3-0.5
	wet	1.0-1.6-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.7-1.3-2.6	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.7-1.3-2.6	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.3-0.8-1.6	none	---	occasional	long	0.0-0.5-1.0
	wet	0.3-0.8-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.7-1.3-2.3	none	---	occasional	long	0.0-0.5-1.0
	wet	0.7-1.3-2.3	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I38A (continued)

Strandquist (3 percent of the map unit)

Month	Moisture status	Top depth		Bottom depth		Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L					R	H	L
January	moist	0.0	0.0	0.0	1.6	3.0	4.1	none	---	none	---	---
	wet	1.6	3.0	4.1	6.7	6.7	6.7					
February	moist	0.0	0.0	0.0	2.5	3.3	4.9	none	---	none	---	---
	wet	2.5	3.3	4.9	6.7	6.7	6.7					
March	moist	0.0	0.0	0.0	1.6	2.1	4.1	none	---	none	---	---
	wet	1.6	2.1	4.1	6.7	6.7	6.7					
April	moist	0.0	0.0	0.0	0.0	0.5	2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0	0.5	2.5	6.7	6.7	6.7					
May	moist	0.0	0.0	0.0	0.5	0.8	3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5	0.8	3.3	6.7	6.7	6.7					
June	moist	0.0	0.0	0.0	0.8	1.6	4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8	1.6	4.1	6.7	6.7	6.7					
July	moist	0.0	0.0	0.0	1.6	3.3	4.9	none	---	none	---	---
	wet	1.6	3.3	4.9	6.7	6.7	6.7					
August	moist	0.0	0.0	0.0	2.5	4.1	5.7	none	---	none	---	---
	wet	2.5	4.1	5.7	6.7	6.7	6.7					
September	moist	0.0	0.0	0.0	1.6	3.3	4.9	none	---	none	---	---
	wet	1.6	3.3	4.9	6.7	6.7	6.7					
October	moist	0.0	0.0	0.0	1.3	2.5	4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.3	2.5	4.1	6.7	6.7	6.7					
November	moist	0.0	0.0	0.0	0.8	1.6	3.3	none	---	none	---	---
	wet	0.8	1.6	3.3	6.7	6.7	6.7					
December	moist	0.0	0.0	0.0	1.3	2.1	3.8	none	---	none	---	---
	wet	1.3	2.1	3.8	6.7	6.7	6.7					

Linveltdt (2 percent of the map unit)

Month	Moisture status	Top depth		Bottom depth		Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L					R	H	L
January	moist	0.0	0.0	0.0	4.8	5.4	6.7	none	---	none	---	---
	wet	4.8	5.4	6.7	6.7	6.7	6.7					
February	moist	0.0	0.0	0.0	5.2	5.7	6.7	none	---	none	---	---
	wet	5.2	5.7	6.7	6.7	6.7	6.7					
March	moist	0.0	0.0	0.0	3.3	4.6	6.7	none	---	none	---	---
	wet	3.3	4.6	6.7	6.7	6.7	6.7					
April	moist	0.0	0.0	0.0	1.3	2.5	4.9	none	---	none	---	---
	wet	1.3	2.5	4.9	6.7	6.7	6.7					
May	moist	0.0	0.0	0.0	2.0	3.0	5.6	none	---	none	---	---
	wet	2.0	3.0	5.6	6.7	6.7	6.7					
June	dry	0.0	0.0	0.0	0.0	0.0	0.5	none	---	none	---	---
	moist	0.0	0.0	0.5	2.6	3.6	6.2					
July	wet	2.6	3.6	6.2	6.7	6.7	6.7					
	dry	0.0	0.0	0.0	0.0	0.0	0.7	none	---	none	---	---
August	moist	0.0	0.0	0.0	3.9	5.4	6.7					
	wet	3.9	5.4	6.7	6.7	6.7	6.7					
September	dry	0.0	0.0	0.0	0.0	0.0	1.0	none	---	none	---	---
	moist	0.0	0.0	1.0	5.4	6.7	6.7					
October	wet	5.4	6.7	6.7	6.7	6.7	6.7					
	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---
November	moist	0.0	0.0	0.3	4.1	4.6	6.7					
	wet	4.1	4.6	6.7	6.7	6.7	6.7					
December	moist	0.0	0.0	0.0	3.6	3.9	6.7	none	---	none	---	---
	wet	3.6	3.9	6.7	6.7	6.7	6.7					
December	moist	0.0	0.0	0.0	2.5	3.3	5.7	none	---	none	---	---
	wet	2.5	3.3	5.7	6.7	6.7	6.7					
December	moist	0.0	0.0	0.0	3.9	4.6	6.2	none	---	none	---	---
	wet	3.9	4.6	6.2	6.7	6.7	6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

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I39A Linveldt fine sandy loam, 0 to 3 percent slopes

Linveldt (65 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.8-5.4-6.7	none	---	none	---	---
	wet	4.8-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	5.2-5.7-6.7	none	---	none	---	---
	wet	5.2-5.7-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.3-2.5-4.9	none	---	none	---	---
	wet	1.3-2.5-4.9	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.0-3.0-5.6	none	---	none	---	---
	wet	2.0-3.0-5.6	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	2.6-3.6-6.2					
July	wet	2.6-3.6-6.2	6.7-6.7-6.7					
	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
August	moist	0.0-0.0-0.7	3.9-5.4-6.7					
	wet	3.9-5.4-6.7	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-1.0	none	---	none	---	---
	moist	0.0-0.0-1.0	5.4-6.7-6.7					
October	wet	5.4-6.7-6.7	6.7-6.7-6.7					
	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
November	moist	0.0-0.0-0.3	4.1-4.6-6.7					
	wet	4.1-4.6-6.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.6-3.9-6.7	none	---	none	---	---
	wet	3.6-3.9-6.7	6.7-6.7-6.7					

Kratka (14 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I39A (continued)

Reiner (10 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.1-5.4-6.7	none	---	none	---	---
	wet	4.1-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	4.9-5.9-6.7	none	---	none	---	---
	wet	4.9-5.9-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.9-6.7	none	---	none	---	---
	wet	3.3-4.9-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.6-2.5-4.1	none	---	none	---	---
	wet	1.6-2.5-4.1	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.1-2.8-4.9	none	---	none	---	---
	wet	2.1-2.8-4.9	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	2.6-3.1-5.7	none	---	none	---	---
	wet	2.6-3.1-5.7	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	3.3-5.7-6.7					
	wet	3.3-5.7-6.7	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	4.9-6.7-6.7					
	wet	4.9-6.7-6.7	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	3.6-4.9-6.7					
	wet	3.6-4.9-6.7	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	3.0-4.3-5.7	none	---	none	---	---
	wet	3.0-4.3-5.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.3-3.3-4.9	none	---	none	---	---
	wet	2.3-3.3-4.9	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.3-4.6-5.7	none	---	none	---	---
	wet	3.3-4.6-5.7	6.7-6.7-6.7					

Smiley (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.3-2.1-3.3	none	---	none	---	---
	wet	1.3-2.1-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.3-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.3-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.7-1.3-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.7-1.3-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	2.0-3.3-4.9	none	---	rare	very brief	0.0-0.3-0.5
	wet	2.0-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.3-1.6-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I39A (continued)

Eckvoll (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.6-5.4-6.7	none	---	none	---	---
	wet	4.6-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	4.9-5.7-6.7	none	---	none	---	---
	wet	4.9-5.7-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	2.1-2.5-4.6	none	---	none	---	---
	wet	2.1-2.5-4.6	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.6-3.1-5.2	none	---	none	---	---
	wet	2.6-3.1-5.2	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.6-3.8-6.2					
	wet	2.6-3.8-6.2	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	3.8-4.9-6.7					
	wet	3.8-4.9-6.7	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-0.8	none	---	none	---	---
	moist	0.0-0.0-0.8	5.2-6.7-6.7					
	wet	5.2-6.7-6.7	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	3.8-4.1-6.7					
	wet	3.8-4.1-6.7	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	3.3-3.8-6.7	none	---	none	---	---
	wet	3.3-3.8-6.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.5-3.3-5.6	none	---	none	---	---
	wet	2.5-3.3-5.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.8-4.1-6.2	none	---	none	---	---
	wet	3.8-4.1-6.2	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I39A (continued)

Foldahl (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.6-5.4-6.7	none	---	none	---	---
	wet	4.6-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	4.9-5.7-6.7	none	---	none	---	---
	wet	4.9-5.7-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.3-2.5-4.6	none	---	none	---	---
	wet	1.3-2.5-4.6	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.0-3.1-5.2	none	---	none	---	---
	wet	2.0-3.1-5.2	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.6-3.8-6.2					
	wet	2.6-3.8-6.2	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	3.8-4.9-6.7					
	wet	3.8-4.9-6.7	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
	moist	0.0-0.0-0.7	5.2-6.7-6.7					
	wet	5.2-6.7-6.7	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	3.8-4.1-6.7					
	wet	3.8-4.1-6.7	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	3.3-3.8-6.7	none	---	none	---	---
	wet	3.3-3.8-6.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.5-3.3-5.6	none	---	none	---	---
	wet	2.5-3.3-5.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.8-4.1-6.2	none	---	none	---	---
	wet	3.8-4.1-6.2	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I39A (continued)

Pelan (1 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.8-5.4-6.7	none	---	none	---	---
	wet	4.8-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	5.2-5.7-6.7	none	---	none	---	---
	wet	5.2-5.7-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.3-2.5-4.9	none	---	none	---	---
	wet	1.3-2.5-4.9	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.0-3.0-5.6	none	---	none	---	---
	wet	2.0-3.0-5.6	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	2.6-3.6-6.2					
	wet	2.6-3.6-6.2	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
	moist	0.0-0.0-0.7	3.9-5.4-6.7					
	wet	3.9-5.4-6.7	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-1.0	none	---	none	---	---
	moist	0.0-0.0-1.0	5.4-6.7-6.7					
	wet	5.4-6.7-6.7	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	4.1-4.6-6.7					
	wet	4.1-4.6-6.7	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	3.6-3.9-6.7	none	---	none	---	---
	wet	3.6-3.9-6.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.5-3.3-5.7	none	---	none	---	---
	wet	2.5-3.3-5.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.9-4.6-6.2	none	---	none	---	---
	wet	3.9-4.6-6.2	6.7-6.7-6.7					

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I40B Maddock loamy fine sand, 1 to 6 percent slopes

Maddock (85 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
February	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
March	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
April	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
May	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
	moist	0.0-0.0-0.7	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-1.0	none	---	none	---	---
	moist	0.0-0.0-1.0	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-1.0	none	---	none	---	---
	moist	0.0-0.0-1.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
November	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
December	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I40B (continued)

Flaming (5 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	4.6	5.4	6.7	none	---	none	---	---	---	---
	wet	4.6	5.4	6.7	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	5.2	6.2	6.7	none	---	none	---	---	---	---
	wet	5.2	6.2	6.7	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	3.3	4.1	6.7	none	---	none	---	---	---	---
	wet	3.3	4.1	6.7	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	2.1	2.5	6.7	none	---	none	---	---	---	---
	wet	2.1	2.5	6.7	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	2.5	2.8	5.7	none	---	none	---	---	---	---
	wet	2.5	2.8	5.7	6.7	6.7	6.7							
June	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	---
	moist	0.0	0.0	0.3	2.6	3.3	6.7							
July	wet	2.6	3.3	6.7	6.7	6.7	6.7							
	dry	0.0	0.0	0.0	0.0	0.0	0.7	none	---	none	---	---	---	---
August	moist	0.0	0.0	0.7	6.7	6.7	6.7							
	dry	0.0	0.0	0.0	0.0	0.0	1.0	none	---	none	---	---	---	---
September	moist	0.0	0.0	1.0	6.7	6.7	6.7							
	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	---
October	moist	0.0	0.0	0.3	4.1	4.9	6.7							
	wet	4.1	4.9	6.7	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	3.3	4.6	6.7	none	---	none	---	---	---	---
	wet	3.3	4.6	6.7	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	2.5	4.1	5.7	none	---	none	---	---	---	---
	wet	2.5	4.1	5.7	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	4.1	4.9	6.7	none	---	none	---	---	---	---
	wet	4.1	4.9	6.7	6.7	6.7	6.7							

Sandberg (5 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	6.7	6.7	6.7	none	---	none	---	---	---	---
February	moist	0.0	0.0	0.0	6.7	6.7	6.7	none	---	none	---	---	---	---
March	moist	0.0	0.0	0.0	6.7	6.7	6.7	none	---	none	---	---	---	---
April	moist	0.0	0.0	0.0	6.7	6.7	6.7	none	---	none	---	---	---	---
May	moist	0.0	0.0	0.0	6.7	6.7	6.7	none	---	none	---	---	---	---
June	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	---
	moist	0.0	0.0	0.3	6.7	6.7	6.7							
July	dry	0.0	0.0	0.0	0.0	0.0	0.7	none	---	none	---	---	---	---
	moist	0.0	0.0	0.7	6.7	6.7	6.7							
August	dry	0.0	0.0	0.0	0.0	0.0	1.0	none	---	none	---	---	---	---
	moist	0.0	0.0	1.0	6.7	6.7	6.7							
September	dry	0.0	0.0	0.0	0.0	0.0	1.0	none	---	none	---	---	---	---
	moist	0.0	0.0	1.0	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	6.7	6.7	6.7	none	---	none	---	---	---	---
November	moist	0.0	0.0	0.0	6.7	6.7	6.7	none	---	none	---	---	---	---
December	moist	0.0	0.0	0.0	6.7	6.7	6.7	none	---	none	---	---	---	---

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I40B (continued)

Halverson (3 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	6.7	6.7	6.7	none	---	none	---	---	---	
February	moist	0.0	0.0	0.0	6.7	6.7	6.7	none	---	none	---	---	---	
March	moist	0.0	0.0	0.0	6.7	6.7	6.7	none	---	none	---	---	---	
April	moist	0.0	0.0	0.0	6.7	6.7	6.7	none	---	none	---	---	---	
May	moist	0.0	0.0	0.0	6.7	6.7	6.7	none	---	none	---	---	---	
June	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	
	moist	0.0	0.0	0.3	6.7	6.7	6.7							
July	dry	0.0	0.0	0.0	0.0	0.0	0.5	none	---	none	---	---	---	
	moist	0.0	0.0	0.5	6.7	6.7	6.7							
August	dry	0.0	0.0	0.0	0.0	0.0	0.8	none	---	none	---	---	---	
	moist	0.0	0.0	0.8	6.7	6.7	6.7							
September	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	
	moist	0.0	0.0	0.3	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	6.7	6.7	6.7	none	---	none	---	---	---	
November	moist	0.0	0.0	0.0	6.7	6.7	6.7	none	---	none	---	---	---	
December	moist	0.0	0.0	0.0	6.7	6.7	6.7	none	---	none	---	---	---	

Hamar (2 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	2.0	2.5	4.9	none	---	none	---	---	---	
	wet	2.0	2.5	4.9	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	2.5	3.3	5.7	none	---	none	---	---	---	
	wet	2.5	3.3	5.7	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	1.6	2.1	4.1	none	---	none	---	---	---	
	wet	1.6	2.1	4.1	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	0.0	0.5	2.5	none	---	occasional	brief	0.0-0.3-0.5		
	wet	0.0	0.5	2.5	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	0.5	1.3	3.3	none	---	occasional	very brief	0.0-0.3-0.5		
	wet	0.5	1.3	3.3	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	0.8	1.6	4.1	none	---	rare	very brief	0.0-0.3-0.5		
	wet	0.8	1.6	4.1	6.7	6.7	6.7							
July	moist	0.0	0.0	0.0	1.6	3.3	4.9	none	---	none	---	---	---	
	wet	1.6	3.3	4.9	6.7	6.7	6.7							
August	moist	0.0	0.0	0.0	2.5	4.9	5.7	none	---	none	---	---	---	
	wet	2.5	4.9	5.7	6.7	6.7	6.7							
September	moist	0.0	0.0	0.0	1.3	3.0	4.9	none	---	none	---	---	---	
	wet	1.3	3.0	4.9	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	1.0	2.1	4.1	none	---	rare	very brief	0.0-0.3-0.5		
	wet	1.0	2.1	4.1	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	0.8	1.6	3.3	none	---	none	---	---	---	
	wet	0.8	1.6	3.3	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	1.3	2.1	4.1	none	---	none	---	---	---	
	wet	1.3	2.1	4.1	6.7	6.7	6.7							

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

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I40F Maddock loamy fine sand, 12 to 30 percent slopes

Maddock (90 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	6.7	6.7	6.7	none	---	none	---	---	---	
February	moist	0.0	0.0	0.0	6.7	6.7	6.7	none	---	none	---	---	---	
March	moist	0.0	0.0	0.0	6.7	6.7	6.7	none	---	none	---	---	---	
April	moist	0.0	0.0	0.0	6.7	6.7	6.7	none	---	none	---	---	---	
May	moist	0.0	0.0	0.0	6.7	6.7	6.7	none	---	none	---	---	---	
June	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	
	moist	0.0	0.0	0.3	6.7	6.7	6.7							
July	dry	0.0	0.0	0.0	0.0	0.0	0.7	none	---	none	---	---	---	
	moist	0.0	0.0	0.7	6.7	6.7	6.7							
August	dry	0.0	0.0	0.0	0.0	0.0	1.0	none	---	none	---	---	---	
	moist	0.0	0.0	1.0	6.7	6.7	6.7							
September	dry	0.0	0.0	0.0	0.0	0.0	1.0	none	---	none	---	---	---	
	moist	0.0	0.0	1.0	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	6.7	6.7	6.7	none	---	none	---	---	---	
November	moist	0.0	0.0	0.0	6.7	6.7	6.7	none	---	none	---	---	---	
December	moist	0.0	0.0	0.0	6.7	6.7	6.7	none	---	none	---	---	---	

Flaming (5 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	4.6	5.4	6.7	none	---	none	---	---	---	
	wet	4.6	5.4	6.7	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	5.2	6.2	6.7	none	---	none	---	---	---	
	wet	5.2	6.2	6.7	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	3.3	4.1	6.7	none	---	none	---	---	---	
	wet	3.3	4.1	6.7	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	2.1	2.5	6.7	none	---	none	---	---	---	
	wet	2.1	2.5	6.7	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	2.5	2.8	5.7	none	---	none	---	---	---	
	wet	2.5	2.8	5.7	6.7	6.7	6.7							
June	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	
	moist	0.0	0.0	0.3	2.6	3.3	6.7							
	wet	2.6	3.3	6.7	6.7	6.7	6.7							
July	dry	0.0	0.0	0.0	0.0	0.0	0.7	none	---	none	---	---	---	
	moist	0.0	0.0	0.7	6.7	6.7	6.7							
August	dry	0.0	0.0	0.0	0.0	0.0	1.0	none	---	none	---	---	---	
	moist	0.0	0.0	1.0	6.7	6.7	6.7							
September	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	
	moist	0.0	0.0	0.3	4.1	4.9	6.7							
	wet	4.1	4.9	6.7	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	3.3	4.6	6.7	none	---	none	---	---	---	
	wet	3.3	4.6	6.7	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	2.5	4.1	5.7	none	---	none	---	---	---	
	wet	2.5	4.1	5.7	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	4.1	4.9	6.7	none	---	none	---	---	---	
	wet	4.1	4.9	6.7	6.7	6.7	6.7							

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I40F (continued)

Sandberg (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
February	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
March	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
April	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
May	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
	moist	0.0-0.0-0.7	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-1.0	none	---	none	---	---
	moist	0.0-0.0-1.0	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-1.0	none	---	none	---	---
	moist	0.0-0.0-1.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
November	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
December	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---

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I41A Markey muck, 0 to 1 percent slopes

Markey (80 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.5-1.3-3.3	none	---	occasional	long	0.0-0.3-0.5
	wet	0.5-1.3-3.3	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	occasional	long	0.0-0.3-0.5
	wet	1.3-2.1-4.1	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-2.5	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.0-1.6	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.2-0.8-2.5	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.2-0.8-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.3-1.1-3.0	none	---	rare	brief	0.0-0.3-0.5
	wet	0.3-1.1-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.2-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.2-0.5-2.5	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.0-0.3-1.6	none	---	occasional	long	0.0-0.3-0.5
	wet	0.0-0.3-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.5-0.8-2.5	none	---	occasional	long	0.0-0.3-0.5
	wet	0.5-0.8-2.5	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I41A (continued)

Deerwood (12 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	occasional	long	0.0-0.5-1.0
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.6-2.5-4.1	none	---	occasional	long	0.0-0.5-1.0
	wet	1.6-2.5-4.1	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-2.5	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.5-1.6	none	---	frequent	brief	0.0-0.5-1.0
	wet	0.0-0.5-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.2-0.8-2.5	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.2-0.8-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.5-1.3-3.0	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-1.3-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.3-0.8-2.5	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.3-0.8-2.5	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.0-0.3-1.6	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.3-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					

Berner (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.5-1.3-3.3	none	---	occasional	long	0.0-0.3-0.5
	wet	0.5-1.3-3.3	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	occasional	long	0.0-0.3-0.5
	wet	1.3-2.1-4.1	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-2.5	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.0-1.6	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.2-0.8-2.5	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.2-0.8-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.3-1.1-3.0	none	---	rare	brief	0.0-0.3-0.5
	wet	0.3-1.1-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.2-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.2-0.5-2.5	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.0-0.3-1.6	none	---	occasional	long	0.0-0.3-0.5
	wet	0.0-0.3-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.5-0.8-2.5	none	---	occasional	long	0.0-0.3-0.5
	wet	0.5-0.8-2.5	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I41A (continued)

Hamar (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.0-2.5-4.9	none	---	none	---	---
	wet	2.0-2.5-4.9	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-5.7	none	---	none	---	---
	wet	2.5-3.3-5.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-1.3-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-1.3-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.9-5.7	none	---	none	---	---
	wet	2.5-4.9-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.3-3.0-4.9	none	---	none	---	---
	wet	1.3-3.0-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.0-2.1-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.0-2.1-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	none	---	---
	wet	1.3-2.1-4.1	6.7-6.7-6.7					

Seelyeville (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.5-1.0-3.3	none	---	occasional	long	0.0-0.3-0.5
	wet	0.5-1.0-3.3	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.3-1.6-4.1	none	---	occasional	long	0.0-0.3-0.5
	wet	1.3-1.6-4.1	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-2.5	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.3-1.6	none	---	frequent	brief	0.0-0.5-1.0
	wet	0.0-0.3-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.0-0.8-2.5	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.0-0.8-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.5-1.6-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-1.6-3.3	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.3-1.1-3.0	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.3-1.1-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.0-0.3-1.6	none	---	occasional	long	0.0-0.3-0.5
	wet	0.0-0.3-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.5-0.8-2.5	none	---	occasional	long	0.0-0.3-0.5
	wet	0.5-0.8-2.5	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I41A (continued)

Syrene (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.0-3.0-4.9	none	---	none	---	---
	wet	2.0-3.0-4.9	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-5.7	none	---	none	---	---
	wet	2.5-3.3-5.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.5-4.1	none	---	none	---	---
	wet	1.6-2.5-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.3-2.5	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.0-0.3-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	1.0-1.6-2.5	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.0-1.6-2.5	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-2.5-4.9	none	---	none	---	---
	wet	1.6-2.5-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.3-5.7	none	---	none	---	---
	wet	2.5-3.3-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.3-2.5-4.9	none	---	none	---	---
	wet	1.3-2.5-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.0-2.1-4.1	none	---	none	---	---
	wet	1.0-2.1-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					

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I42A Markey muck, ponded, 0 to 1 percent slopes

Markey, ponded (85 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	wet	0.0-0.0-0.0	6.7-6.7-6.7	none	---	frequent	very long	0.0-1.0-4.0
February	wet	0.0-0.0-0.0	6.7-6.7-6.7	none	---	frequent	very long	0.0-1.0-4.0
March	wet	0.0-0.0-0.0	6.7-6.7-6.7	none	---	frequent	very long	0.0-1.0-4.0
April	wet	0.0-0.0-0.0	6.7-6.7-6.7	none	---	frequent	very long	0.0-1.0-4.0
May	wet	0.0-0.0-0.0	6.7-6.7-6.7	none	---	frequent	very long	0.0-1.0-4.0
June	wet	0.0-0.0-0.0	6.7-6.7-6.7	none	---	frequent	very long	0.0-1.0-4.0
July	wet	0.0-0.0-0.0	6.7-6.7-6.7	none	---	frequent	very long	0.0-1.0-4.0
August	wet	0.0-0.0-0.0	6.7-6.7-6.7	none	---	frequent	very long	0.0-1.0-4.0
September	wet	0.0-0.0-0.0	6.7-6.7-6.7	none	---	frequent	very long	0.0-1.0-4.0
October	wet	0.0-0.0-0.0	6.7-6.7-6.7	none	---	frequent	very long	0.0-1.0-4.0
November	wet	0.0-0.0-0.0	6.7-6.7-6.7	none	---	frequent	very long	0.0-1.0-4.0
December	wet	0.0-0.0-0.0	6.7-6.7-6.7	none	---	frequent	very long	0.0-1.0-4.0

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I42A (continued)

Markey (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.5-1.3-3.3	none	---	occasional	long	0.0-0.3-0.5
	wet	0.5-1.3-3.3	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	occasional	long	0.0-0.3-0.5
	wet	1.3-2.1-4.1	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-2.5	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.0-1.6	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.2-0.8-2.5	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.2-0.8-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.3-1.1-3.0	none	---	rare	brief	0.0-0.3-0.5
	wet	0.3-1.1-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.2-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.2-0.5-2.5	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.0-0.3-1.6	none	---	occasional	long	0.0-0.3-0.5
	wet	0.0-0.3-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.5-0.8-2.5	none	---	occasional	long	0.0-0.3-0.5
	wet	0.5-0.8-2.5	6.7-6.7-6.7					

Deerwood (4 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	occasional	long	0.0-0.5-1.0
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.6-2.5-4.1	none	---	occasional	long	0.0-0.5-1.0
	wet	1.6-2.5-4.1	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-2.5	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.5-1.6	none	---	frequent	brief	0.0-0.5-1.0
	wet	0.0-0.5-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.2-0.8-2.5	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.2-0.8-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.5-1.3-3.0	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-1.3-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.3-0.8-2.5	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.3-0.8-2.5	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.0-0.3-1.6	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.3-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I42A (continued)

Seelyeville, ponded (4 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	wet	0.0	0.0	0.0	6.7	6.7	6.7	none	---	frequent	very long	0.0	1.0	4.0
February	wet	0.0	0.0	0.0	6.7	6.7	6.7	none	---	frequent	very long	0.0	1.0	4.0
March	wet	0.0	0.0	0.0	6.7	6.7	6.7	none	---	frequent	very long	0.0	1.0	4.0
April	wet	0.0	0.0	0.0	6.7	6.7	6.7	none	---	frequent	very long	0.0	1.0	4.0
May	wet	0.0	0.0	0.0	6.7	6.7	6.7	none	---	frequent	very long	0.0	1.0	4.0
June	wet	0.0	0.0	0.0	6.7	6.7	6.7	none	---	frequent	very long	0.0	1.0	4.0
July	wet	0.0	0.0	0.0	6.7	6.7	6.7	none	---	frequent	very long	0.0	1.0	4.0
August	wet	0.0	0.0	0.0	6.7	6.7	6.7	none	---	frequent	very long	0.0	1.0	4.0
September	wet	0.0	0.0	0.0	6.7	6.7	6.7	none	---	frequent	very long	0.0	1.0	4.0
October	wet	0.0	0.0	0.0	6.7	6.7	6.7	none	---	frequent	very long	0.0	1.0	4.0
November	wet	0.0	0.0	0.0	6.7	6.7	6.7	none	---	frequent	very long	0.0	1.0	4.0
December	wet	0.0	0.0	0.0	6.7	6.7	6.7	none	---	frequent	very long	0.0	1.0	4.0

Hamar (1 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	2.0	2.5	4.9	none	---	none	---	---	---	---
	wet	2.0	2.5	4.9	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	2.5	3.3	5.7	none	---	none	---	---	---	---
	wet	2.5	3.3	5.7	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	1.6	2.1	4.1	none	---	none	---	---	---	---
	wet	1.6	2.1	4.1	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	0.0	0.5	2.5	none	---	occasional	brief	0.0	0.3	0.5
	wet	0.0	0.5	2.5	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	0.5	1.3	3.3	none	---	occasional	very brief	0.0	0.3	0.5
	wet	0.5	1.3	3.3	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	0.8	1.6	4.1	none	---	rare	very brief	0.0	0.3	0.5
	wet	0.8	1.6	4.1	6.7	6.7	6.7							
July	moist	0.0	0.0	0.0	1.6	3.3	4.9	none	---	none	---	---	---	---
	wet	1.6	3.3	4.9	6.7	6.7	6.7							
August	moist	0.0	0.0	0.0	2.5	4.9	5.7	none	---	none	---	---	---	---
	wet	2.5	4.9	5.7	6.7	6.7	6.7							
September	moist	0.0	0.0	0.0	1.3	3.0	4.9	none	---	none	---	---	---	---
	wet	1.3	3.0	4.9	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	1.0	2.1	4.1	none	---	rare	very brief	0.0	0.3	0.5
	wet	1.0	2.1	4.1	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	0.8	1.6	3.3	none	---	none	---	---	---	---
	wet	0.8	1.6	3.3	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	1.3	2.1	4.1	none	---	none	---	---	---	---
	wet	1.3	2.1	4.1	6.7	6.7	6.7							

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I42A (continued)

Hangaard (1 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.0-3.0-4.9	none	---	none	---	---
	wet	2.0-3.0-4.9	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-5.7	none	---	none	---	---
	wet	2.5-3.3-5.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.5-4.1	none	---	none	---	---
	wet	1.6-2.5-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.3-2.5	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.0-0.3-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	1.0-1.6-2.5	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.0-1.6-2.5	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-2.5-4.9	none	---	none	---	---
	wet	1.6-2.5-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.3-5.7	none	---	none	---	---
	wet	2.5-3.3-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.3-2.5-4.9	none	---	none	---	---
	wet	1.3-2.5-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.0-2.1-4.1	none	---	none	---	---
	wet	1.0-2.1-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					

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I43A Mavie fine sandy loam, 0 to 2 percent slopes

Mavie (70 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I43A (continued)

Valliers (10 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.3-2.1-3.3	none	---	none	---	---
	wet	1.3-2.1-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.3-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.3-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.7-1.3-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.7-1.3-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	2.0-3.3-4.9	none	---	rare	very brief	0.0-0.3-0.5
	wet	2.0-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.3-1.6-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Strandquist (7 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I43A (continued)

Strathcona (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Strathcona, depressional (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.0-1.6-3.0	none	---	occasional	long	0.0-0.5-1.0
	wet	1.0-1.6-3.0	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.6-2.5-3.3	none	---	occasional	long	0.0-0.5-1.0
	wet	1.6-2.5-3.3	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.0	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-2.0	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-1.0	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.0	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-2.0	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-2.0	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.2-0.8-2.5	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.2-0.8-2.5	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.7-1.6-3.0	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.7-1.6-3.0	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	1.6-2.5-3.6	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.6-2.5-3.6	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.0-1.6-3.0	none	---	rare	brief	0.0-0.3-0.5
	wet	1.0-1.6-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.7-1.3-2.6	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.7-1.3-2.6	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.3-0.8-1.6	none	---	occasional	long	0.0-0.5-1.0
	wet	0.3-0.8-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.7-1.3-2.3	none	---	occasional	long	0.0-0.5-1.0
	wet	0.7-1.3-2.3	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I43A (continued)

Foxhome (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.8-5.4-6.7	none	---	none	---	---
	wet	4.8-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	5.2-5.7-6.7	none	---	none	---	---
	wet	5.2-5.7-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.3-2.5-4.9	none	---	none	---	---
	wet	1.3-2.5-4.9	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.0-3.0-5.6	none	---	none	---	---
	wet	2.0-3.0-5.6	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	2.6-3.6-6.2					
	wet	2.6-3.6-6.2	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
	moist	0.0-0.0-0.7	3.9-5.4-6.7					
	wet	3.9-5.4-6.7	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-1.0	none	---	none	---	---
	moist	0.0-0.0-1.0	5.4-6.7-6.7					
	wet	5.4-6.7-6.7	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	4.1-4.6-6.7					
	wet	4.1-4.6-6.7	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	3.6-3.9-6.7	none	---	none	---	---
	wet	3.6-3.9-6.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.5-3.3-5.7	none	---	none	---	---
	wet	2.5-3.3-5.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.9-4.6-6.2	none	---	none	---	---
	wet	3.9-4.6-6.2	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I43A (continued)

Karlsruhe (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.6-3.3-6.2	none	---	none	---	---
	wet	2.6-3.3-6.2	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	3.3-4.1-6.7	none	---	none	---	---
	wet	3.3-4.1-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	2.6-3.3-5.9	none	---	none	---	---
	wet	2.6-3.3-5.9	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.5-2.0-3.3	none	---	none	---	---
	wet	1.5-2.0-3.3	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	1.8-2.5-4.1	none	---	none	---	---
	wet	1.8-2.5-4.1	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	2.5-3.0-4.9	none	---	none	---	---
	wet	2.5-3.0-4.9	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	3.0-3.6-6.7					
	wet	3.0-3.6-6.7	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	4.1-6.7-6.7					
	wet	4.1-6.7-6.7	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.6-4.1-6.7					
October	moist	0.0-0.0-0.0	3.0-4.3-5.7	none	---	none	---	---
	wet	3.0-4.3-5.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.0-2.5-4.9	none	---	none	---	---
	wet	2.0-2.5-4.9	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	2.3-3.0-5.6	none	---	none	---	---
	wet	2.3-3.0-5.6	6.7-6.7-6.7					

Grimstad (1 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	2.5-3.0-5.7	none	---	none	---	---
	wet	2.5-3.0-5.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.8-1.5-3.3	none	---	none	---	---
	wet	0.8-1.5-3.3	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	1.1-1.8-4.1	none	---	none	---	---
	wet	1.1-1.8-4.1	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.5-5.7-6.2					
	wet	2.5-5.7-6.2	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.5-3.8-6.7					
	wet	2.5-3.8-6.7	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	2.0-3.0-5.6	none	---	none	---	---
	wet	2.0-3.0-5.6	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	1.6-2.5-4.9	none	---	none	---	---
	wet	1.6-2.5-4.9	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	2.0-3.3-5.4	none	---	none	---	---
	wet	2.0-3.3-5.4	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

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I44A Newfolden loam, 0 to 3 percent slopes

Newfolden (75 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	4.1	5.4	6.7	none	---	none	---	---	---	---
	wet	4.1	5.4	6.7	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	4.9	5.9	6.7	none	---	none	---	---	---	---
	wet	4.9	5.9	6.7	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	3.3	4.9	6.7	none	---	none	---	---	---	---
	wet	3.3	4.9	6.7	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	1.6	2.5	4.1	none	---	none	---	---	---	---
	wet	1.6	2.5	4.1	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	2.1	2.8	4.9	none	---	none	---	---	---	---
	wet	2.1	2.8	4.9	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	2.6	3.1	5.7	none	---	none	---	---	---	---
	wet	2.6	3.1	5.7	6.7	6.7	6.7							
July	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	---
	moist	0.0	0.0	0.3	3.3	5.7	6.7							
	wet	3.3	5.7	6.7	6.7	6.7	6.7							
August	dry	0.0	0.0	0.0	0.0	0.0	0.5	none	---	none	---	---	---	---
	moist	0.0	0.0	0.5	4.9	6.7	6.7							
September	wet	4.9	6.7	6.7	6.7	6.7	6.7							
	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	---
October	moist	0.0	0.0	0.3	3.6	4.9	6.7							
	wet	3.6	4.9	6.7	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	3.0	4.3	5.7	none	---	none	---	---	---	---
	wet	3.0	4.3	5.7	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	2.3	3.3	4.9	none	---	none	---	---	---	---
	wet	2.3	3.3	4.9	6.7	6.7	6.7							

Smiley (12 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	1.6	3.0	4.1	none	---	none	---	---	---	---
	wet	1.6	3.0	4.1	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	2.5	3.3	4.9	none	---	none	---	---	---	---
	wet	2.5	3.3	4.9	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	1.3	2.1	3.3	none	---	none	---	---	---	---
	wet	1.3	2.1	3.3	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	0.0	0.5	2.5	none	---	occasional	brief	0.0-0.3-0.5		
	wet	0.0	0.5	2.5	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	0.3	0.8	3.3	none	---	occasional	brief	0.0-0.3-0.5		
	wet	0.3	0.8	3.3	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	0.7	1.3	4.1	none	---	occasional	very brief	0.0-0.3-0.5		
	wet	0.7	1.3	4.1	6.7	6.7	6.7							
July	moist	0.0	0.0	0.0	1.6	3.0	4.9	none	---	none	---	---	---	---
	wet	1.6	3.0	4.9	6.7	6.7	6.7							
August	moist	0.0	0.0	0.0	2.5	3.8	5.7	none	---	none	---	---	---	---
	wet	2.5	3.8	5.7	6.7	6.7	6.7							
September	moist	0.0	0.0	0.0	2.0	3.3	4.9	none	---	rare	very brief	0.0-0.3-0.5		
	wet	2.0	3.3	4.9	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	1.3	1.6	4.1	none	---	rare	very brief	0.0-0.3-0.5		
	wet	1.3	1.6	4.1	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	0.8	1.3	3.3	none	---	occasional	brief	0.0-0.3-0.5		
	wet	0.8	1.3	3.3	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	1.3	2.1	3.8	none	---	none	---	---	---	---
	wet	1.3	2.1	3.8	6.7	6.7	6.7							

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I44A (continued)

Boash (8 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.8-2.1-4.1	none	---	none	---	---
	wet	0.8-2.1-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.6-2.5-4.9	none	---	none	---	---
	wet	1.6-2.5-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.3-1.3-3.3	none	---	none	---	---
	wet	0.3-1.3-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-1.6	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.3-2.1-4.1	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	occasional	very brief	0.0-0.2-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					

Linveltdt (4 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.8-5.4-6.7	none	---	none	---	---
	wet	4.8-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	5.2-5.7-6.7	none	---	none	---	---
	wet	5.2-5.7-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.3-2.5-4.9	none	---	none	---	---
	wet	1.3-2.5-4.9	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.0-3.0-5.6	none	---	none	---	---
	wet	2.0-3.0-5.6	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	2.6-3.6-6.2					
July	wet	2.6-3.6-6.2	6.7-6.7-6.7					
	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
August	moist	0.0-0.0-0.7	3.9-5.4-6.7					
	wet	3.9-5.4-6.7	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-1.0	none	---	none	---	---
	moist	0.0-0.0-1.0	5.4-6.7-6.7					
October	wet	5.4-6.7-6.7	6.7-6.7-6.7					
	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
November	moist	0.0-0.0-0.3	4.1-4.6-6.7					
	wet	4.1-4.6-6.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.6-3.9-6.7	none	---	none	---	---
	wet	3.6-3.9-6.7	6.7-6.7-6.7					
January	moist	0.0-0.0-0.0	2.5-3.3-5.7	none	---	none	---	---
	wet	2.5-3.3-5.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	3.9-4.6-6.2	none	---	none	---	---
	wet	3.9-4.6-6.2	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I44A (continued)

Hapludolls (1 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
February	moist	0.0	0.0	0.0	6.7	6.7	6.7	none	---	none	---	---	---	---
March	moist	0.0	0.0	0.0	5.7	6.7	6.7	rare	brief	none	---	---	---	
	wet	5.7	6.7	6.7	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	4.9	6.7	6.7	rare	brief	none	---	---	---	
	wet	4.9	6.7	6.7	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	5.7	6.7	6.7	rare	brief	none	---	---	---	
	wet	5.7	6.7	6.7	6.7	6.7	6.7							
June	dry	0.0	0.0	0.0	0.0	0.0	0.3	rare	very brief	none	---	---	---	
	moist	0.0	0.0	0.3	6.7	6.7	6.7							
July	dry	0.0	0.0	0.0	0.0	0.0	0.5	very rare	very brief	none	---	---	---	
	moist	0.0	0.0	0.5	6.7	6.7	6.7							
August	dry	0.0	0.0	0.0	0.0	0.0	0.5	very rare	very brief	none	---	---	---	
	moist	0.0	0.0	0.5	6.7	6.7	6.7							
September	dry	0.0	0.0	0.0	0.0	0.0	0.5	rare	very brief	none	---	---	---	
	moist	0.0	0.0	0.5	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	6.7	6.7	6.7	rare	brief	none	---	---	---	
November	moist	0.0	0.0	0.0	6.7	6.7	6.7	rare	brief	none	---	---	---	
	wet	5.7	6.7	6.7	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	6.7	6.7	6.7	none	---	none	---	---	---	

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I45A Northwood muck, 0 to 1 percent slopes

Northwood (75 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	0.8	1.6	3.3	none	---	occasional	long	0.0	0.5	1.0
	wet	0.8	1.6	3.3	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	1.6	2.5	4.1	none	---	occasional	long	0.0	0.5	1.0
	wet	1.6	2.5	4.1	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	0.0	0.0	2.5	none	---	occasional	long	0.0	0.5	1.0
	wet	0.0	0.0	2.5	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	0.0	0.0	0.8	none	---	frequent	long	0.0	0.5	1.0
	wet	0.0	0.0	0.8	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	0.0	0.0	1.3	none	---	frequent	long	0.0	0.5	1.0
	wet	0.0	0.0	1.3	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	0.0	0.5	1.6	none	---	frequent	brief	0.0	0.5	1.0
	wet	0.0	0.5	1.6	6.7	6.7	6.7							
July	moist	0.0	0.0	0.0	0.2	0.8	2.5	none	---	rare	very brief	0.0	0.3	0.5
	wet	0.2	0.8	2.5	6.7	6.7	6.7							
August	moist	0.0	0.0	0.0	0.8	1.6	3.3	none	---	rare	very brief	0.0	0.3	0.5
	wet	0.8	1.6	3.3	6.7	6.7	6.7							
September	moist	0.0	0.0	0.0	0.5	1.3	3.0	none	---	occasional	brief	0.0	0.3	0.5
	wet	0.5	1.3	3.0	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	0.3	0.8	2.5	none	---	occasional	brief	0.0	0.5	1.0
	wet	0.3	0.8	2.5	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	0.0	0.3	1.6	none	---	occasional	long	0.0	0.5	1.0
	wet	0.0	0.3	1.6	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	0.5	1.3	2.5	none	---	occasional	long	0.0	0.5	1.0
	wet	0.5	1.3	2.5	6.7	6.7	6.7							

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I45A (continued)

Hamre (10 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	occasional	long	0.0-0.5-1.0
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.6-2.5-4.1	none	---	occasional	long	0.0-0.5-1.0
	wet	1.6-2.5-4.1	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-2.5	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.5-1.6	none	---	frequent	brief	0.0-0.5-1.0
	wet	0.0-0.5-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.2-0.8-2.5	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.2-0.8-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.5-1.3-3.0	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-1.3-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.3-0.8-2.5	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.3-0.8-2.5	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.0-0.3-1.6	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.3-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					

Berner (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.5-1.3-3.3	none	---	occasional	long	0.0-0.3-0.5
	wet	0.5-1.3-3.3	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	occasional	long	0.0-0.3-0.5
	wet	1.3-2.1-4.1	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-2.5	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.0-1.6	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.2-0.8-2.5	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.2-0.8-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.3-1.1-3.0	none	---	rare	brief	0.0-0.3-0.5
	wet	0.3-1.1-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.2-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.2-0.5-2.5	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.0-0.3-1.6	none	---	occasional	long	0.0-0.3-0.5
	wet	0.0-0.3-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.5-0.8-2.5	none	---	occasional	long	0.0-0.3-0.5
	wet	0.5-0.8-2.5	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I45A (continued)

Kratka (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Strandquist (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I45A (continued)

Roliss (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.3-2.1-3.3	none	---	none	---	---
	wet	1.3-2.1-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.3-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.3-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.7-1.3-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.7-1.3-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	2.0-3.3-4.9	none	---	rare	very brief	0.0-0.3-0.5
	wet	2.0-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.3-1.6-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

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I46A Pits, gravel and sand

Pits (85 percent of the map unit) (not applicable)

Udipsammments (10 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
February	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
March	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
April	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
May	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
June	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
	moist	0.0-0.0-0.7	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-1.0	none	---	none	---	---
	moist	0.0-0.0-1.0	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-1.3	none	---	none	---	---
	moist	0.0-0.0-1.3	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-1.0	none	---	none	---	---
	moist	0.0-0.0-1.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
November	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
December	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I46A (continued)

Radium (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.9-5.4-6.7	none	---	none	---	---
	wet	4.9-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	5.7-6.2-6.7	none	---	none	---	---
	wet	5.7-6.2-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.1-6.7	none	---	none	---	---
	wet	3.3-4.1-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	2.1-3.0-4.9	none	---	none	---	---
	wet	2.1-3.0-4.9	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.6-3.8-5.7	none	---	none	---	---
	wet	2.6-3.8-5.7	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	3.3-4.4-6.7					
	wet	3.3-4.4-6.7	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
	moist	0.0-0.0-0.7	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-1.0	none	---	none	---	---
	moist	0.0-0.0-1.0	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
	moist	0.0-0.0-0.7	4.1-4.9-6.7					
October	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	4.1-4.9-6.7	none	---	none	---	---
	wet	4.1-4.9-6.7	6.7-6.7-6.7					

Maddock (1 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
February	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
March	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
April	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
May	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
June	dry	0.0-0.0-0.0	0.0-0.2-0.3	none	---	none	---	---
	moist	0.0-0.2-0.3	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.3-0.7	none	---	none	---	---
	moist	0.0-0.3-0.7	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.7-1.0	none	---	none	---	---
	moist	0.0-0.7-1.0	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.5-1.0	none	---	none	---	---
	moist	0.0-0.5-1.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
November	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
December	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I46A (continued)

Marquette (1 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
February	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
March	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
April	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
May	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
June	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
	moist	0.0-0.0-0.7	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-1.0	none	---	none	---	---
	moist	0.0-0.0-1.0	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-1.1	none	---	none	---	---
	moist	0.0-0.0-1.1	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-1.0	none	---	none	---	---
	moist	0.0-0.0-1.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
November	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
December	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.0	6.7-6.7-6.7					

Sandberg (1 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
February	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
March	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
April	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
May	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
	moist	0.0-0.0-0.7	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-1.0	none	---	none	---	---
	moist	0.0-0.0-1.0	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-1.0	none	---	none	---	---
	moist	0.0-0.0-1.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
November	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
December	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

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I47A Poppleton fine sand, 0 to 2 percent slopes

Poppleton (75 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	4.6	5.4	6.7	none	---	none	---	---	---	
	wet	4.6	5.4	6.7	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	5.2	6.2	6.7	none	---	none	---	---	---	
	wet	5.2	6.2	6.7	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	3.3	4.1	6.7	none	---	none	---	---	---	
	wet	3.3	4.1	6.7	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	2.1	2.5	6.7	none	---	none	---	---	---	
	wet	2.1	2.5	6.7	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	2.5	2.8	5.7	none	---	none	---	---	---	
	wet	2.5	2.8	5.7	6.7	6.7	6.7							
June	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	
	moist	0.0	0.0	0.3	2.6	3.3	6.7							
July	wet	2.6	3.3	6.7	6.7	6.7	6.7	none	---	none	---	---	---	
	dry	0.0	0.0	0.0	0.0	0.0	0.7							
August	moist	0.0	0.0	0.7	6.7	6.7	6.7	none	---	none	---	---	---	
	dry	0.0	0.0	0.0	0.0	0.0	1.0							
September	moist	0.0	0.0	1.0	6.7	6.7	6.7	none	---	none	---	---	---	
	dry	0.0	0.0	0.0	0.0	0.0	0.3							
October	moist	0.0	0.0	0.3	4.1	4.9	6.7	none	---	none	---	---	---	
	wet	4.1	4.9	6.7	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	3.3	4.6	6.7	none	---	none	---	---	---	
	wet	3.3	4.6	6.7	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	2.5	4.1	5.7	none	---	none	---	---	---	
	wet	2.5	4.1	5.7	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	4.1	4.9	6.7	none	---	none	---	---	---	
	wet	4.1	4.9	6.7	6.7	6.7	6.7							

Flaming (12 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	4.6	5.4	6.7	none	---	none	---	---	---	
	wet	4.6	5.4	6.7	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	5.2	6.2	6.7	none	---	none	---	---	---	
	wet	5.2	6.2	6.7	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	3.3	4.1	6.7	none	---	none	---	---	---	
	wet	3.3	4.1	6.7	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	2.1	2.5	6.7	none	---	none	---	---	---	
	wet	2.1	2.5	6.7	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	2.5	2.8	5.7	none	---	none	---	---	---	
	wet	2.5	2.8	5.7	6.7	6.7	6.7							
June	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	
	moist	0.0	0.0	0.3	2.6	3.3	6.7							
July	wet	2.6	3.3	6.7	6.7	6.7	6.7	none	---	none	---	---	---	
	dry	0.0	0.0	0.0	0.0	0.0	0.7							
August	moist	0.0	0.0	0.7	6.7	6.7	6.7	none	---	none	---	---	---	
	dry	0.0	0.0	0.0	0.0	0.0	1.0							
September	moist	0.0	0.0	1.0	6.7	6.7	6.7	none	---	none	---	---	---	
	dry	0.0	0.0	0.0	0.0	0.0	0.3							
October	moist	0.0	0.0	0.3	4.1	4.9	6.7	none	---	none	---	---	---	
	wet	4.1	4.9	6.7	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	3.3	4.6	6.7	none	---	none	---	---	---	
	wet	3.3	4.6	6.7	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	2.5	4.1	5.7	none	---	none	---	---	---	
	wet	2.5	4.1	5.7	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	4.1	4.9	6.7	none	---	none	---	---	---	
	wet	4.1	4.9	6.7	6.7	6.7	6.7							

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I47A (continued)

Garborg (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.6-3.3-5.9	none	---	none	---	---
	wet	2.6-3.3-5.9	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	3.3-4.1-6.7	none	---	none	---	---
	wet	3.3-4.1-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	2.6-3.3-5.7	none	---	none	---	---
	wet	2.6-3.3-5.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.1-1.5-3.3	none	---	none	---	---
	wet	1.1-1.5-3.3	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	1.5-1.8-4.1	none	---	none	---	---
	wet	1.5-1.8-4.1	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.0-2.5-4.9					
	wet	2.0-2.5-4.9	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	2.6-4.9-6.2					
	wet	2.6-4.9-6.2	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
	moist	0.0-0.0-0.7	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.6-4.9-6.7					
	wet	2.6-4.9-6.7	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	2.3-3.0-5.7	none	---	none	---	---
	wet	2.3-3.0-5.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.0-2.5-4.9	none	---	none	---	---
	wet	2.0-2.5-4.9	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	2.3-3.0-5.2	none	---	none	---	---
	wet	2.3-3.0-5.2	6.7-6.7-6.7					

Hamar (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.0-2.5-4.9	none	---	none	---	---
	wet	2.0-2.5-4.9	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-5.7	none	---	none	---	---
	wet	2.5-3.3-5.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-1.3-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-1.3-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.9-5.7	none	---	none	---	---
	wet	2.5-4.9-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.3-3.0-4.9	none	---	none	---	---
	wet	1.3-3.0-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.0-2.1-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.0-2.1-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	none	---	---
	wet	1.3-2.1-4.1	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I47A (continued)

Radium (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.9-5.4-6.7	none	---	none	---	---
	wet	4.9-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	5.7-6.2-6.7	none	---	none	---	---
	wet	5.7-6.2-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.1-6.7	none	---	none	---	---
	wet	3.3-4.1-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	2.1-3.0-4.9	none	---	none	---	---
	wet	2.1-3.0-4.9	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.6-3.8-5.7	none	---	none	---	---
	wet	2.6-3.8-5.7	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	3.3-4.4-6.7					
	wet	3.3-4.4-6.7	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
	moist	0.0-0.0-0.7	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-1.0	none	---	none	---	---
	moist	0.0-0.0-1.0	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
	moist	0.0-0.0-0.7	4.1-4.9-6.7					
	wet	4.1-4.9-6.7	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	4.1-4.9-6.7	none	---	none	---	---
	wet	4.1-4.9-6.7	6.7-6.7-6.7					

Ulen (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.6-3.3-5.9	none	---	none	---	---
	wet	2.6-3.3-5.9	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	3.3-4.1-6.7	none	---	none	---	---
	wet	3.3-4.1-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	2.6-3.3-5.7	none	---	none	---	---
	wet	2.6-3.3-5.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.5-2.0-3.3	none	---	none	---	---
	wet	1.5-2.0-3.3	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.0-2.5-4.1	none	---	none	---	---
	wet	2.0-2.5-4.1	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.5-3.0-4.9					
	wet	2.5-3.0-4.9	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	3.0-4.9-6.2					
August	wet	3.0-4.9-6.2	6.7-6.7-6.7					
	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
September	moist	0.0-0.0-0.7	6.7-6.7-6.7					
	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
October	moist	0.0-0.0-0.5	2.6-4.9-6.7					
	wet	2.6-4.9-6.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.3-3.0-5.7	none	---	none	---	---
	wet	2.3-3.0-5.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	2.0-2.5-4.9	none	---	none	---	---
	wet	2.0-2.5-4.9	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I47A (continued)

Maddock (1 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
February	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
March	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
April	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
May	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
	moist	0.0-0.0-0.7	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-1.0	none	---	none	---	---
	moist	0.0-0.0-1.0	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-1.0	none	---	none	---	---
	moist	0.0-0.0-1.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
November	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
December	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---

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I48A Radium loamy sand, 0 to 3 percent slopes

Radium (75 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.9-5.4-6.7	none	---	none	---	---
	wet	4.9-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	5.7-6.2-6.7	none	---	none	---	---
	wet	5.7-6.2-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.1-6.7	none	---	none	---	---
	wet	3.3-4.1-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	2.1-3.0-4.9	none	---	none	---	---
	wet	2.1-3.0-4.9	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.6-3.8-5.7	none	---	none	---	---
	wet	2.6-3.8-5.7	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	3.3-4.4-6.7					
	wet	3.3-4.4-6.7	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
	moist	0.0-0.0-0.7	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-1.0	none	---	none	---	---
	moist	0.0-0.0-1.0	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
	moist	0.0-0.0-0.7	4.1-4.9-6.7					
	wet	4.1-4.9-6.7	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	4.1-4.9-6.7	none	---	none	---	---
	wet	4.1-4.9-6.7	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I48A (continued)

Sandberg (7 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	6.7	6.7	6.7	none	---	none	---	---	---	
February	moist	0.0	0.0	0.0	6.7	6.7	6.7	none	---	none	---	---	---	
March	moist	0.0	0.0	0.0	6.7	6.7	6.7	none	---	none	---	---	---	
April	moist	0.0	0.0	0.0	6.7	6.7	6.7	none	---	none	---	---	---	
May	moist	0.0	0.0	0.0	6.7	6.7	6.7	none	---	none	---	---	---	
June	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	
	moist	0.0	0.0	0.3	6.7	6.7	6.7							
July	dry	0.0	0.0	0.0	0.0	0.0	0.7	none	---	none	---	---	---	
	moist	0.0	0.0	0.7	6.7	6.7	6.7							
August	dry	0.0	0.0	0.0	0.0	0.0	1.0	none	---	none	---	---	---	
	moist	0.0	0.0	1.0	6.7	6.7	6.7							
September	dry	0.0	0.0	0.0	0.0	0.0	1.0	none	---	none	---	---	---	
	moist	0.0	0.0	1.0	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	6.7	6.7	6.7	none	---	none	---	---	---	
November	moist	0.0	0.0	0.0	6.7	6.7	6.7	none	---	none	---	---	---	
December	moist	0.0	0.0	0.0	6.7	6.7	6.7	none	---	none	---	---	---	

Oylen (5 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	4.9	5.4	6.7	none	---	none	---	---	---	
	wet	4.9	5.4	6.7	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	5.7	6.2	6.7	none	---	none	---	---	---	
	wet	5.7	6.2	6.7	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	3.3	4.1	6.7	none	---	none	---	---	---	
	wet	3.3	4.1	6.7	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	2.1	3.0	4.9	none	---	none	---	---	---	
	wet	2.1	3.0	4.9	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	2.6	3.8	5.7	none	---	none	---	---	---	
	wet	2.6	3.8	5.7	6.7	6.7	6.7							
June	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	
	moist	0.0	0.0	0.3	3.3	4.4	6.7							
	wet	3.3	4.4	6.7	6.7	6.7	6.7							
July	dry	0.0	0.0	0.0	0.0	0.0	0.7	none	---	none	---	---	---	
	moist	0.0	0.0	0.7	6.7	6.7	6.7							
August	dry	0.0	0.0	0.0	0.0	0.0	1.0	none	---	none	---	---	---	
	moist	0.0	0.0	1.0	6.7	6.7	6.7							
September	dry	0.0	0.0	0.0	0.0	0.0	0.7	none	---	none	---	---	---	
	moist	0.0	0.0	0.7	4.1	4.9	6.7							
	wet	4.1	4.9	6.7	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	3.3	4.6	6.7	none	---	none	---	---	---	
	wet	3.3	4.6	6.7	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	2.5	4.1	5.7	none	---	none	---	---	---	
	wet	2.5	4.1	5.7	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	4.1	4.9	6.7	none	---	none	---	---	---	
	wet	4.1	4.9	6.7	6.7	6.7	6.7							

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I48A (continued)

Flaming (4 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.6-5.4-6.7	none	---	none	---	---
	wet	4.6-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	5.2-6.2-6.7	none	---	none	---	---
	wet	5.2-6.2-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.1-6.7	none	---	none	---	---
	wet	3.3-4.1-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	2.1-2.5-6.7	none	---	none	---	---
	wet	2.1-2.5-6.7	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.5-2.8-5.7	none	---	none	---	---
	wet	2.5-2.8-5.7	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.6-3.3-6.7					
	wet	2.6-3.3-6.7	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
	moist	0.0-0.0-0.7	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-1.0	none	---	none	---	---
	moist	0.0-0.0-1.0	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	4.1-4.9-6.7					
	wet	4.1-4.9-6.7	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	4.1-4.9-6.7	none	---	none	---	---
	wet	4.1-4.9-6.7	6.7-6.7-6.7					

Garborg (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.6-3.3-5.9	none	---	none	---	---
	wet	2.6-3.3-5.9	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	3.3-4.1-6.7	none	---	none	---	---
	wet	3.3-4.1-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	2.6-3.3-5.7	none	---	none	---	---
	wet	2.6-3.3-5.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.1-1.5-3.3	none	---	none	---	---
	wet	1.1-1.5-3.3	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	1.5-1.8-4.1	none	---	none	---	---
	wet	1.5-1.8-4.1	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.0-2.5-4.9					
	wet	2.0-2.5-4.9	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	2.6-4.9-6.2					
August	wet	2.6-4.9-6.2	6.7-6.7-6.7					
	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
September	moist	0.0-0.0-0.7	6.7-6.7-6.7					
	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.6-4.9-6.7					
October	wet	2.6-4.9-6.7	6.7-6.7-6.7					
	moist	0.0-0.0-0.0	2.3-3.0-5.7	none	---	none	---	---
November	wet	2.3-3.0-5.7	6.7-6.7-6.7					
	moist	0.0-0.0-0.0	2.0-2.5-4.9	none	---	none	---	---
December	wet	2.0-2.5-4.9	6.7-6.7-6.7					
	moist	0.0-0.0-0.0	2.3-3.0-5.2	none	---	none	---	---
	wet	2.3-3.0-5.2	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I48A (continued)

Hangaard (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.0-3.0-4.9	none	---	none	---	---
	wet	2.0-3.0-4.9	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-5.7	none	---	none	---	---
	wet	2.5-3.3-5.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.5-4.1	none	---	none	---	---
	wet	1.6-2.5-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.3-2.5	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.0-0.3-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	1.0-1.6-2.5	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.0-1.6-2.5	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-2.5-4.9	none	---	none	---	---
	wet	1.6-2.5-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.3-5.7	none	---	none	---	---
	wet	2.5-3.3-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.3-2.5-4.9	none	---	none	---	---
	wet	1.3-2.5-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.0-2.1-4.1	none	---	none	---	---
	wet	1.0-2.1-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					

Hamar (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.0-2.5-4.9	none	---	none	---	---
	wet	2.0-2.5-4.9	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-5.7	none	---	none	---	---
	wet	2.5-3.3-5.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-1.3-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-1.3-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.9-5.7	none	---	none	---	---
	wet	2.5-4.9-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.3-3.0-4.9	none	---	none	---	---
	wet	1.3-3.0-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.0-2.1-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.0-2.1-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	none	---	---
	wet	1.3-2.1-4.1	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I48A (continued)

Poppleton (1 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.6-5.4-6.7	none	---	none	---	---
	wet	4.6-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	5.2-6.2-6.7	none	---	none	---	---
	wet	5.2-6.2-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.1-6.7	none	---	none	---	---
	wet	3.3-4.1-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	2.1-2.5-6.7	none	---	none	---	---
	wet	2.1-2.5-6.7	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.5-2.8-5.7	none	---	none	---	---
	wet	2.5-2.8-5.7	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.6-3.3-6.7					
	wet	2.6-3.3-6.7	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
	moist	0.0-0.0-0.7	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-1.0	none	---	none	---	---
	moist	0.0-0.0-1.0	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	4.1-4.9-6.7					
	wet	4.1-4.9-6.7	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	4.1-4.9-6.7	none	---	none	---	---
	wet	4.1-4.9-6.7	6.7-6.7-6.7					

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I49A Rauville silty clay loam, 0 to 2 percent slopes

Rauville (80 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	frequent	very long	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	0.8-1.6-3.0	none	---	frequent	very long	0.0-0.5-1.0
	wet	0.8-1.6-3.0	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-1.6	frequent	very long	frequent	very long	0.0-0.5-1.0
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	very frequent	very long	frequent	very long	0.0-0.7-1.3
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	very frequent	long	frequent	very long	0.0-0.7-1.3
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.5-1.6	frequent	long	frequent	very long	0.0-0.5-1.0
	wet	0.0-0.5-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.5-1.3-2.5	frequent	brief	occasional	long	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.8-1.6-3.0	frequent	brief	occasional	brief	0.0-0.5-1.0
	wet	0.8-1.6-3.0	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.5-1.3-2.5	frequent	long	occasional	brief	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.3-0.8-2.0	frequent	long	occasional	long	0.0-0.5-1.0
	wet	0.3-0.8-2.0	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.2-0.5-1.6	rare	long	occasional	long	0.0-0.5-1.0
	wet	0.2-0.5-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.3-0.8-2.0	none	---	frequent	very long	0.0-0.5-1.0
	wet	0.3-0.8-2.0	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I49A (continued)

Fluvaquents (12 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	frequent	very long	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	0.8-1.6-3.0	none	---	frequent	very long	0.0-0.5-1.0
	wet	0.8-1.6-3.0	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-1.6	frequent	very long	frequent	very long	0.0-0.5-1.0
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	very frequent	very long	frequent	very long	0.0-0.7-1.3
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	very frequent	long	frequent	very long	0.0-0.7-1.3
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.5-1.6	frequent	long	frequent	very long	0.0-0.5-1.0
	wet	0.0-0.5-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.5-1.3-2.5	frequent	brief	occasional	long	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.8-1.6-3.0	frequent	brief	occasional	brief	0.0-0.5-1.0
	wet	0.8-1.6-3.0	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.5-1.3-2.5	frequent	long	occasional	brief	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.3-0.8-2.0	frequent	long	occasional	long	0.0-0.5-1.0
	wet	0.3-0.8-2.0	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.2-0.5-1.6	rare	long	occasional	long	0.0-0.5-1.0
	wet	0.2-0.5-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.3-0.8-2.0	none	---	frequent	very long	0.0-0.5-1.0
	wet	0.3-0.8-2.0	6.7-6.7-6.7					

Water (5 percent of the map unit) (not applicable)

Lamoure (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.3-2.1-3.3	frequent	brief	none	---	---
	wet	1.3-2.1-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	frequent	brief	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.3-0.8-3.3	frequent	brief	occasional	brief	0.0-0.3-0.5
	wet	0.3-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.7-1.3-4.1	frequent	brief	occasional	very brief	0.0-0.3-0.5
	wet	0.7-1.3-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	frequent	brief	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	frequent	brief	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	2.0-3.3-4.9	frequent	brief	rare	very brief	0.0-0.1-0.3
	wet	2.0-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-1.6-4.1	frequent	brief	rare	very brief	0.0-0.1-0.3
	wet	1.3-1.6-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	very brief	0.0-0.1-0.3
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

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I50A Reiner fine sandy loam, 0 to 3 percent slopes

Reiner (70 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.1-5.4-6.7	none	---	none	---	---
	wet	4.1-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	4.9-5.9-6.7	none	---	none	---	---
	wet	4.9-5.9-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.9-6.7	none	---	none	---	---
	wet	3.3-4.9-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.6-2.5-4.1	none	---	none	---	---
	wet	1.6-2.5-4.1	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.1-2.8-4.9	none	---	none	---	---
	wet	2.1-2.8-4.9	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	2.6-3.1-5.7	none	---	none	---	---
	wet	2.6-3.1-5.7	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	3.3-5.7-6.7					
	wet	3.3-5.7-6.7	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	4.9-6.7-6.7					
	wet	4.9-6.7-6.7	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	3.6-4.9-6.7					
	wet	3.6-4.9-6.7	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	3.0-4.3-5.7	none	---	none	---	---
	wet	3.0-4.3-5.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.3-3.3-4.9	none	---	none	---	---
	wet	2.3-3.3-4.9	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.3-4.6-5.7	none	---	none	---	---
	wet	3.3-4.6-5.7	6.7-6.7-6.7					

Smiley (12 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.3-2.1-3.3	none	---	none	---	---
	wet	1.3-2.1-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.3-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.3-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.7-1.3-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.7-1.3-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	2.0-3.3-4.9	none	---	rare	very brief	0.0-0.3-0.5
	wet	2.0-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.3-1.6-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I50A (continued)

Reiner, very cobbly (7 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.1-5.4-6.7	none	---	none	---	---
	wet	4.1-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	4.9-5.9-6.7	none	---	none	---	---
	wet	4.9-5.9-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.9-6.7	none	---	none	---	---
	wet	3.3-4.9-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.6-2.5-4.1	none	---	none	---	---
	wet	1.6-2.5-4.1	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.1-2.8-4.9	none	---	none	---	---
	wet	2.1-2.8-4.9	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	2.6-3.1-5.7	none	---	none	---	---
	wet	2.6-3.1-5.7	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	3.3-5.7-6.7					
	wet	3.3-5.7-6.7	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	4.9-6.7-6.7					
	wet	4.9-6.7-6.7	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	3.6-4.9-6.7					
	wet	3.6-4.9-6.7	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	3.0-4.3-5.7	none	---	none	---	---
	wet	3.0-4.3-5.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.3-3.3-4.9	none	---	none	---	---
	wet	2.3-3.3-4.9	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.3-4.6-5.7	none	---	none	---	---
	wet	3.3-4.6-5.7	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I50A (continued)

Linveldt (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.8-5.4-6.7	none	---	none	---	---
	wet	4.8-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	5.2-5.7-6.7	none	---	none	---	---
	wet	5.2-5.7-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.3-2.5-4.9	none	---	none	---	---
	wet	1.3-2.5-4.9	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.0-3.0-5.6	none	---	none	---	---
	wet	2.0-3.0-5.6	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	2.6-3.6-6.2					
July	wet	2.6-3.6-6.2	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.7					
August	moist	0.0-0.0-0.7	3.9-5.4-6.7	none	---	none	---	---
	wet	3.9-5.4-6.7	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-1.0	none	---	none	---	---
	moist	0.0-0.0-1.0	5.4-6.7-6.7					
October	wet	5.4-6.7-6.7	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.3	4.1-4.6-6.7					
November	wet	4.1-4.6-6.7	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.0	3.6-3.9-6.7					
December	wet	3.6-3.9-6.7	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.0	2.5-3.3-5.7					
December	wet	2.5-3.3-5.7	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.0	3.9-4.6-6.2					
December	wet	3.9-4.6-6.2	6.7-6.7-6.7	none	---	none	---	---

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I50A (continued)

Eckvoll (3 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	4.6	5.4	6.7	none	---	none	---	---	---	
	wet	4.6	5.4	6.7	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	4.9	5.7	6.7	none	---	none	---	---	---	
	wet	4.9	5.7	6.7	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	3.3	4.6	6.7	none	---	none	---	---	---	
	wet	3.3	4.6	6.7	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	2.1	2.5	4.6	none	---	none	---	---	---	
	wet	2.1	2.5	4.6	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	2.6	3.1	5.2	none	---	none	---	---	---	
	wet	2.6	3.1	5.2	6.7	6.7	6.7							
June	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	
	moist	0.0	0.0	0.3	2.6	3.8	6.2							
	wet	2.6	3.8	6.2	6.7	6.7	6.7							
July	dry	0.0	0.0	0.0	0.0	0.0	0.5	none	---	none	---	---	---	
	moist	0.0	0.0	0.5	3.8	4.9	6.7							
	wet	3.8	4.9	6.7	6.7	6.7	6.7							
August	dry	0.0	0.0	0.0	0.0	0.0	0.8	none	---	none	---	---	---	
	moist	0.0	0.0	0.8	5.2	6.7	6.7							
	wet	5.2	6.7	6.7	6.7	6.7	6.7							
September	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	
	moist	0.0	0.0	0.3	3.8	4.1	6.7							
	wet	3.8	4.1	6.7	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	3.3	3.8	6.7	none	---	none	---	---	---	
	wet	3.3	3.8	6.7	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	2.5	3.3	5.6	none	---	none	---	---	---	
	wet	2.5	3.3	5.6	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	3.8	4.1	6.2	none	---	none	---	---	---	
	wet	3.8	4.1	6.2	6.7	6.7	6.7							

Kratka (3 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	1.6	3.0	4.1	none	---	none	---	---	---	
	wet	1.6	3.0	4.1	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	2.5	3.3	4.9	none	---	none	---	---	---	
	wet	2.5	3.3	4.9	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	1.6	2.1	4.1	none	---	none	---	---	---	
	wet	1.6	2.1	4.1	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	0.0	0.5	2.5	none	---	occasional	brief	0.0-0.3-0.5		
	wet	0.0	0.5	2.5	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	0.5	0.8	3.3	none	---	occasional	very brief	0.0-0.3-0.5		
	wet	0.5	0.8	3.3	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	0.8	1.6	4.1	none	---	rare	very brief	0.0-0.1-0.3		
	wet	0.8	1.6	4.1	6.7	6.7	6.7							
July	moist	0.0	0.0	0.0	1.6	3.3	4.9	none	---	none	---	---	---	
	wet	1.6	3.3	4.9	6.7	6.7	6.7							
August	moist	0.0	0.0	0.0	2.5	4.1	5.7	none	---	none	---	---	---	
	wet	2.5	4.1	5.7	6.7	6.7	6.7							
September	moist	0.0	0.0	0.0	1.6	3.3	4.9	none	---	none	---	---	---	
	wet	1.6	3.3	4.9	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	1.3	2.5	4.1	none	---	rare	very brief	0.0-0.1-0.3		
	wet	1.3	2.5	4.1	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	0.8	1.6	3.3	none	---	rare	very brief	0.0-0.1-0.3		
	wet	0.8	1.6	3.3	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	1.3	2.1	3.8	none	---	none	---	---	---	
	wet	1.3	2.1	3.8	6.7	6.7	6.7							

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

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I51A Reiner loamy fine sand, 0 to 3 percent slopes

Reiner (65 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.1-5.4-6.7	none	---	none	---	---
	wet	4.1-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	4.9-5.9-6.7	none	---	none	---	---
	wet	4.9-5.9-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.9-6.7	none	---	none	---	---
	wet	3.3-4.9-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.6-2.5-4.1	none	---	none	---	---
	wet	1.6-2.5-4.1	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.1-2.8-4.9	none	---	none	---	---
	wet	2.1-2.8-4.9	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.6-3.1-5.7					
July	wet	2.6-3.1-5.7	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.5					
August	moist	0.0-0.0-0.5	3.3-5.7-6.7	none	---	none	---	---
	wet	3.3-5.7-6.7	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	3.6-4.9-6.7					
October	wet	3.6-4.9-6.7	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.0	3.0-4.3-5.7					
November	wet	3.0-4.3-5.7	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.0	2.3-3.3-4.9					
December	wet	2.3-3.3-4.9	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.0	3.3-4.6-5.7					
	wet	3.3-4.6-5.7	6.7-6.7-6.7					

Smiley (9 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.3-2.1-3.3	none	---	none	---	---
	wet	1.3-2.1-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.3-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.3-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.7-1.3-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.7-1.3-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	2.0-3.3-4.9	none	---	rare	very brief	0.0-0.3-0.5
	wet	2.0-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.3-1.6-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					



Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I51A (continued)

Linveltdt (7 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.8-5.4-6.7	none	---	none	---	---
	wet	4.8-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	5.2-5.7-6.7	none	---	none	---	---
	wet	5.2-5.7-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.3-2.5-4.9	none	---	none	---	---
	wet	1.3-2.5-4.9	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.0-3.0-5.6	none	---	none	---	---
	wet	2.0-3.0-5.6	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	2.6-3.6-6.2					
	wet	2.6-3.6-6.2	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
	moist	0.0-0.0-0.7	3.9-5.4-6.7					
	wet	3.9-5.4-6.7	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-1.0	none	---	none	---	---
	moist	0.0-0.0-1.0	5.4-6.7-6.7					
	wet	5.4-6.7-6.7	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	4.1-4.6-6.7					
	wet	4.1-4.6-6.7	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	3.6-3.9-6.7	none	---	none	---	---
	wet	3.6-3.9-6.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.5-3.3-5.7	none	---	none	---	---
	wet	2.5-3.3-5.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.9-4.6-6.2	none	---	none	---	---
	wet	3.9-4.6-6.2	6.7-6.7-6.7					

Kratka (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I51A (continued)

Eckvoll (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.6-5.4-6.7	none	---	none	---	---
	wet	4.6-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	4.9-5.7-6.7	none	---	none	---	---
	wet	4.9-5.7-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	2.1-2.5-4.6	none	---	none	---	---
	wet	2.1-2.5-4.6	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.6-3.1-5.2	none	---	none	---	---
	wet	2.6-3.1-5.2	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.6-3.8-6.2					
	wet	2.6-3.8-6.2	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	3.8-4.9-6.7					
	wet	3.8-4.9-6.7	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-0.8	none	---	none	---	---
	moist	0.0-0.0-0.8	5.2-6.7-6.7					
	wet	5.2-6.7-6.7	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	3.8-4.1-6.7					
	wet	3.8-4.1-6.7	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	3.3-3.8-6.7	none	---	none	---	---
	wet	3.3-3.8-6.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.5-3.3-5.6	none	---	none	---	---
	wet	2.5-3.3-5.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.8-4.1-6.2	none	---	none	---	---
	wet	3.8-4.1-6.2	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I51A (continued)

Reiner, very cobbly (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.1-5.4-6.7	none	---	none	---	---
	wet	4.1-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	4.9-5.9-6.7	none	---	none	---	---
	wet	4.9-5.9-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.9-6.7	none	---	none	---	---
	wet	3.3-4.9-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.6-2.5-4.1	none	---	none	---	---
	wet	1.6-2.5-4.1	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.1-2.8-4.9	none	---	none	---	---
	wet	2.1-2.8-4.9	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	2.6-3.1-5.7	none	---	none	---	---
	wet	2.6-3.1-5.7	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	3.3-5.7-6.7					
August	wet	3.3-5.7-6.7	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.5					
September	moist	0.0-0.0-0.5	4.9-6.7-6.7	none	---	none	---	---
	wet	4.9-6.7-6.7	6.7-6.7-6.7					
October	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	3.6-4.9-6.7					
November	wet	3.6-4.9-6.7	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.0	3.0-4.3-5.7					
December	wet	3.0-4.3-5.7	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.0	2.3-3.3-4.9					
December	wet	2.3-3.3-4.9	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.0	3.3-4.6-5.7					
December	wet	3.3-4.6-5.7	6.7-6.7-6.7	none	---	none	---	---

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I52A Reis-Clearwater complex, 0 to 2 percent slopes

Reis (55 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.0-2.6-4.9	none	---	none	---	---
	wet	2.0-2.6-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.8-2.0-3.9	none	---	none	---	---
	wet	0.8-2.0-3.9	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	none	---	---
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.3-0.8-3.0	none	---	none	---	---
	wet	0.3-0.8-3.0	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-3.6	none	---	none	---	---
	wet	0.8-1.6-3.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-2.8-4.6	none	---	none	---	---
	wet	1.6-2.8-4.6	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.6-5.4	none	---	none	---	---
	wet	2.5-3.6-5.4	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.1-4.6	none	---	none	---	---
	wet	1.6-3.1-4.6	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.1-2.0-4.1	none	---	none	---	---
	wet	1.1-2.0-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.7-1.6-3.3	none	---	none	---	---
	wet	0.7-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.1-2.0-3.8	none	---	none	---	---
	wet	1.1-2.0-3.8	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I52A (continued)

Clearwater (30 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.8-2.1-4.1	none	---	none	---	---
	wet	0.8-2.1-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.6-2.5-4.9	none	---	none	---	---
	wet	1.6-2.5-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.3-1.3-3.3	none	---	none	---	---
	wet	0.3-1.3-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-1.6	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.3-2.1-4.1	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	occasional	very brief	0.0-0.2-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					

Clearwater, very cobbly (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.8-2.1-4.1	none	---	none	---	---
	wet	0.8-2.1-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.6-2.5-4.9	none	---	none	---	---
	wet	1.6-2.5-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.3-1.3-3.3	none	---	none	---	---
	wet	0.3-1.3-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-1.6	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.3-2.1-4.1	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	occasional	very brief	0.0-0.2-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I52A (continued)

Clearwater, depressiona (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	0.8-1.6-3.0	none	---	occasional	long	0.0-0.5-1.0
	wet	0.8-1.6-3.0	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-1.6	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.5-1.6	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.5-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.8-1.6-3.0	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.8-1.6-3.0	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.3-0.8-2.0	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.3-0.8-2.0	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.2-0.5-1.6	none	---	occasional	long	0.0-0.5-1.0
	wet	0.2-0.5-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.3-0.8-2.0	none	---	occasional	long	0.0-0.5-1.0
	wet	0.3-0.8-2.0	6.7-6.7-6.7					

Espelie (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.0-2.6-4.9	none	---	none	---	---
	wet	2.0-2.6-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.5-2.3-4.9	none	---	none	---	---
	wet	1.5-2.3-4.9	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.0-3.9	none	---	none	---	---
	wet	1.3-2.0-3.9	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I52A (continued)

Hattie (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.1-5.7-6.7	none	---	none	---	---
	wet	4.1-5.7-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	4.9-6.7-6.7	none	---	none	---	---
	wet	4.9-6.7-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	4.1-5.7-6.7	none	---	none	---	---
	wet	4.1-5.7-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	none	---	---
	wet	1.3-2.1-4.1	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	1.6-2.5-4.1	none	---	none	---	---
	wet	1.6-2.5-4.1	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	2.0-3.0-5.7	none	---	none	---	---
	wet	2.0-3.0-5.7	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	2.5-4.1-6.7	none	---	none	---	---
	wet	2.5-4.1-6.7	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	3.3-4.9-6.7	none	---	none	---	---
	wet	3.3-4.9-6.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.6-4.9-6.7	none	---	none	---	---
	wet	3.6-4.9-6.7	6.7-6.7-6.7					

Wyandotte (1 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.0-2.6-4.9	none	---	none	---	---
	wet	2.0-2.6-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.5-2.3-4.1	none	---	none	---	---
	wet	1.5-2.3-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.0-3.9	none	---	none	---	---
	wet	1.3-2.0-3.9	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

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I53A Roliss loam, 0 to 2 percent slopes

Roliss (75 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.3-2.1-3.3	none	---	none	---	---
	wet	1.3-2.1-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.3-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.3-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.7-1.3-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.7-1.3-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	2.0-3.3-4.9	none	---	rare	very brief	0.0-0.3-0.5
	wet	2.0-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.3-1.6-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Kratka (8 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I53A (continued)

Roliss, very cobbly (7 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.3-2.1-3.3	none	---	none	---	---
	wet	1.3-2.1-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.3-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.3-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.7-1.3-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.7-1.3-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	2.0-3.3-4.9	none	---	rare	very brief	0.0-0.3-0.5
	wet	2.0-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.3-1.6-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Kittson (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.1-5.4-6.7	none	---	none	---	---
	wet	4.1-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	4.9-5.9-6.7	none	---	none	---	---
	wet	4.9-5.9-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.9-6.7	none	---	none	---	---
	wet	3.3-4.9-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.6-2.5-4.1	none	---	none	---	---
	wet	1.6-2.5-4.1	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.1-2.8-4.9	none	---	none	---	---
	wet	2.1-2.8-4.9	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.6-3.1-5.7					
July	wet	2.6-3.1-5.7	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.3					
August	moist	0.0-0.0-0.3	3.3-5.7-6.7	none	---	none	---	---
	wet	3.3-5.7-6.7	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	4.9-6.7-6.7					
October	wet	4.9-6.7-6.7	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.3					
November	moist	0.0-0.0-0.3	3.6-4.9-6.7	none	---	none	---	---
	wet	3.6-4.9-6.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.0-4.3-5.7	none	---	none	---	---
	wet	3.0-4.3-5.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.3-3.3-4.9	none	---	none	---	---
	wet	2.3-3.3-4.9	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.3-4.6-5.7	none	---	none	---	---
	wet	3.3-4.6-5.7	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I53A (continued)

Roliss, depressional (3 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	0.8	1.6	3.0	none	---	occasional	long	0.0	0.5	1.0
	wet	0.8	1.6	3.0	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	1.6	2.5	3.3	none	---	occasional	long	0.0	0.5	1.0
	wet	1.6	2.5	3.3	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	0.0	0.0	1.6	none	---	occasional	long	0.0	0.5	1.0
	wet	0.0	0.0	1.6	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	0.0	0.0	0.8	none	---	frequent	long	0.0	0.5	1.0
	wet	0.0	0.0	0.8	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	0.0	0.0	1.6	none	---	frequent	long	0.0	0.5	1.0
	wet	0.0	0.0	1.6	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	0.2	0.8	2.5	none	---	occasional	brief	0.0	0.5	1.0
	wet	0.2	0.8	2.5	6.7	6.7	6.7							
July	moist	0.0	0.0	0.0	0.8	1.6	3.0	none	---	rare	very brief	0.0	0.3	0.5
	wet	0.8	1.6	3.0	6.7	6.7	6.7							
August	moist	0.0	0.0	0.0	1.6	2.1	3.3	none	---	rare	very brief	0.0	0.3	0.5
	wet	1.6	2.1	3.3	6.7	6.7	6.7							
September	moist	0.0	0.0	0.0	0.8	1.6	3.0	none	---	rare	brief	0.0	0.3	0.5
	wet	0.8	1.6	3.0	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	0.5	1.3	2.5	none	---	occasional	brief	0.0	0.3	0.5
	wet	0.5	1.3	2.5	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	0.2	0.5	1.6	none	---	occasional	long	0.0	0.5	1.0
	wet	0.2	0.5	1.6	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	0.3	0.8	2.0	none	---	occasional	long	0.0	0.5	1.0
	wet	0.3	0.8	2.0	6.7	6.7	6.7							

Smiley (2 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	1.6	3.0	4.1	none	---	none	---	---	---	---
	wet	1.6	3.0	4.1	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	2.5	3.3	4.9	none	---	none	---	---	---	---
	wet	2.5	3.3	4.9	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	1.3	2.1	3.3	none	---	none	---	---	---	---
	wet	1.3	2.1	3.3	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	0.0	0.5	2.5	none	---	occasional	brief	0.0	0.3	0.5
	wet	0.0	0.5	2.5	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	0.3	0.8	3.3	none	---	occasional	brief	0.0	0.3	0.5
	wet	0.3	0.8	3.3	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	0.7	1.3	4.1	none	---	occasional	very brief	0.0	0.3	0.5
	wet	0.7	1.3	4.1	6.7	6.7	6.7							
July	moist	0.0	0.0	0.0	1.6	3.0	4.9	none	---	none	---	---	---	---
	wet	1.6	3.0	4.9	6.7	6.7	6.7							
August	moist	0.0	0.0	0.0	2.5	3.8	5.7	none	---	none	---	---	---	---
	wet	2.5	3.8	5.7	6.7	6.7	6.7							
September	moist	0.0	0.0	0.0	2.0	3.3	4.9	none	---	rare	very brief	0.0	0.3	0.5
	wet	2.0	3.3	4.9	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	1.3	1.6	4.1	none	---	rare	very brief	0.0	0.3	0.5
	wet	1.3	1.6	4.1	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	0.8	1.3	3.3	none	---	occasional	brief	0.0	0.3	0.5
	wet	0.8	1.3	3.3	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	1.3	2.1	3.8	none	---	none	---	---	---	---
	wet	1.3	2.1	3.8	6.7	6.7	6.7							

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

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I54A Roliss loam, depressional, 0 to 1 percent slopes

Roliss, depressional (80 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.8-1.6-3.0	none	---	occasional	long	0.0-0.5-1.0
	wet	0.8-1.6-3.0	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.6-2.5-3.3	none	---	occasional	long	0.0-0.5-1.0
	wet	1.6-2.5-3.3	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-1.6	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.6	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.2-0.8-2.5	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.2-0.8-2.5	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.8-1.6-3.0	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-3.0	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	1.6-2.1-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.6-2.1-3.3	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.8-1.6-3.0	none	---	rare	brief	0.0-0.3-0.5
	wet	0.8-1.6-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.2-0.5-1.6	none	---	occasional	long	0.0-0.5-1.0
	wet	0.2-0.5-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.3-0.8-2.0	none	---	occasional	long	0.0-0.5-1.0
	wet	0.3-0.8-2.0	6.7-6.7-6.7					

Roliss (12 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.3-2.1-3.3	none	---	none	---	---
	wet	1.3-2.1-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.3-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.3-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.7-1.3-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.7-1.3-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	2.0-3.3-4.9	none	---	rare	very brief	0.0-0.3-0.5
	wet	2.0-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.3-1.6-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I54A (continued)

Hamre (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	occasional	long	0.0-0.5-1.0
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.6-2.5-4.1	none	---	occasional	long	0.0-0.5-1.0
	wet	1.6-2.5-4.1	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-2.5	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.5-1.6	none	---	frequent	brief	0.0-0.5-1.0
	wet	0.0-0.5-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.2-0.8-2.5	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.2-0.8-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.5-1.3-3.0	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-1.3-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.3-0.8-2.5	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.3-0.8-2.5	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.0-0.3-1.6	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.3-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					

Kratka (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

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I55A Rosewood fine sandy loam, 0 to 2 percent slopes

Rosewood (75 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	2.0	2.5	4.9	none	---	none	---	---		
	wet	2.0	2.5	4.9	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	2.5	3.3	5.7	none	---	none	---	---		
	wet	2.5	3.3	5.7	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	1.6	2.1	4.1	none	---	none	---	---		
	wet	1.6	2.1	4.1	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	0.0	0.5	2.5	none	---	occasional	brief	0.0-0.3-0.5		
	wet	0.0	0.5	2.5	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	0.5	1.3	3.3	none	---	occasional	very brief	0.0-0.3-0.5		
	wet	0.5	1.3	3.3	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	0.8	1.6	4.1	none	---	rare	very brief	0.0-0.3-0.5		
	wet	0.8	1.6	4.1	6.7	6.7	6.7							
July	moist	0.0	0.0	0.0	1.6	3.3	4.9	none	---	none	---	---		
	wet	1.6	3.3	4.9	6.7	6.7	6.7							
August	moist	0.0	0.0	0.0	2.5	4.9	5.7	none	---	none	---	---		
	wet	2.5	4.9	5.7	6.7	6.7	6.7							
September	moist	0.0	0.0	0.0	1.3	3.0	4.9	none	---	none	---	---		
	wet	1.3	3.0	4.9	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	1.0	2.1	4.1	none	---	rare	very brief	0.0-0.3-0.5		
	wet	1.0	2.1	4.1	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	0.8	1.6	3.3	none	---	none	---	---		
	wet	0.8	1.6	3.3	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	1.3	2.1	4.1	none	---	none	---	---		
	wet	1.3	2.1	4.1	6.7	6.7	6.7							

Ulen (10 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	2.6	3.3	5.9	none	---	none	---	---		
	wet	2.6	3.3	5.9	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	3.3	4.1	6.7	none	---	none	---	---		
	wet	3.3	4.1	6.7	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	2.6	3.3	5.7	none	---	none	---	---		
	wet	2.6	3.3	5.7	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	1.5	2.0	3.3	none	---	none	---	---		
	wet	1.5	2.0	3.3	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	2.0	2.5	4.1	none	---	none	---	---		
	wet	2.0	2.5	4.1	6.7	6.7	6.7							
June	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---		
	moist	0.0	0.0	0.3	2.5	3.0	4.9							
July	wet	2.5	3.0	4.9	6.7	6.7	6.7							
	dry	0.0	0.0	0.0	0.0	0.0	0.5	none	---	none	---	---		
August	moist	0.0	0.0	0.5	3.0	4.9	6.2							
	wet	3.0	4.9	6.2	6.7	6.7	6.7							
September	dry	0.0	0.0	0.0	0.0	0.0	0.7	none	---	none	---	---		
	moist	0.0	0.0	0.7	6.7	6.7	6.7							
October	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---		
	moist	0.0	0.0	0.3	2.6	4.9	6.7							
November	wet	2.6	4.9	6.7	6.7	6.7	6.7							
	moist	0.0	0.0	0.0	2.3	3.0	5.7	none	---	none	---	---		
December	wet	2.3	3.0	5.7	6.7	6.7	6.7							
	moist	0.0	0.0	0.0	2.0	2.5	4.9	none	---	none	---	---		
December	wet	2.0	2.5	4.9	6.7	6.7	6.7							
	moist	0.0	0.0	0.0	2.3	3.0	5.2	none	---	none	---	---		
December	wet	2.3	3.0	5.2	6.7	6.7	6.7							

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I55A (continued)

Hamar (6 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.0-2.5-4.9	none	---	none	---	---
	wet	2.0-2.5-4.9	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-5.7	none	---	none	---	---
	wet	2.5-3.3-5.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-1.3-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-1.3-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.9-5.7	none	---	none	---	---
	wet	2.5-4.9-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.3-3.0-4.9	none	---	none	---	---
	wet	1.3-3.0-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.0-2.1-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.0-2.1-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	none	---	---
	wet	1.3-2.1-4.1	6.7-6.7-6.7					

Rosewood, depressional (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.8-1.6-3.0	none	---	occasional	long	0.0-0.5-1.0
	wet	0.8-1.6-3.0	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.0-3.0-3.6	none	---	occasional	long	0.0-0.5-1.0
	wet	2.0-3.0-3.6	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.5-2.0	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.5-2.0	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-1.0	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.0	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.5-2.0	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.5-2.0	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.3-1.3-2.6	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.3-1.3-2.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.0-2.1-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.0-2.1-3.3	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.0-3.0-3.8	none	---	rare	very brief	0.0-0.3-0.5
	wet	2.0-3.0-3.8	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.0-2.1-3.3	none	---	rare	brief	0.0-0.3-0.5
	wet	1.0-2.1-3.3	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.7-1.6-2.6	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.7-1.6-2.6	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.3-1.3-2.0	none	---	occasional	long	0.0-0.5-1.0
	wet	0.3-1.3-2.0	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.7-1.6-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.7-1.6-2.5	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I55A (continued)

Syrene (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.0-3.0-4.9	none	---	none	---	---
	wet	2.0-3.0-4.9	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-5.7	none	---	none	---	---
	wet	2.5-3.3-5.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.5-4.1	none	---	none	---	---
	wet	1.6-2.5-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.3-2.5	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.0-0.3-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	1.0-1.6-2.5	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.0-1.6-2.5	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-2.5-4.9	none	---	none	---	---
	wet	1.6-2.5-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.3-5.7	none	---	none	---	---
	wet	2.5-3.3-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.3-2.5-4.9	none	---	none	---	---
	wet	1.3-2.5-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.0-2.1-4.1	none	---	none	---	---
	wet	1.0-2.1-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					

Karlsruhe (1 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.6-3.3-6.2	none	---	none	---	---
	wet	2.6-3.3-6.2	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	3.3-4.1-6.7	none	---	none	---	---
	wet	3.3-4.1-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	2.6-3.3-5.9	none	---	none	---	---
	wet	2.6-3.3-5.9	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.5-2.0-3.3	none	---	none	---	---
	wet	1.5-2.0-3.3	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	1.8-2.5-4.1	none	---	none	---	---
	wet	1.8-2.5-4.1	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	2.5-3.0-4.9	none	---	none	---	---
	wet	2.5-3.0-4.9	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	3.0-3.6-6.7					
	wet	3.0-3.6-6.7	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	4.1-6.7-6.7					
September	wet	4.1-6.7-6.7	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.3					
October	moist	0.0-0.0-0.3	2.6-4.1-6.7	none	---	none	---	---
	wet	2.6-4.1-6.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	3.0-4.3-5.7	none	---	none	---	---
	wet	3.0-4.3-5.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	2.0-2.5-4.9	none	---	none	---	---
	wet	2.0-2.5-4.9	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	2.3-3.0-5.6	none	---	none	---	---
	wet	2.3-3.0-5.6	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I55A (continued)

Strathcona (1 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Thiefriever (1 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.0-2.6-4.9	none	---	none	---	---
	wet	2.0-2.6-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.5-2.3-4.9	none	---	none	---	---
	wet	1.5-2.3-4.9	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.0-3.9	none	---	none	---	---
	wet	1.3-2.0-3.9	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

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I56A Rosewood-Venlo complex, 0 to 1 percent slopes

Rosewood (50 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.0-2.5-4.9	none	---	none	---	---
	wet	2.0-2.5-4.9	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-5.7	none	---	none	---	---
	wet	2.5-3.3-5.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-1.3-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-1.3-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.9-5.7	none	---	none	---	---
	wet	2.5-4.9-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.3-3.0-4.9	none	---	none	---	---
	wet	1.3-3.0-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.0-2.1-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.0-2.1-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	none	---	---
	wet	1.3-2.1-4.1	6.7-6.7-6.7					

Venlo (40 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.8-1.6-3.0	none	---	occasional	long	0.0-0.5-1.0
	wet	0.8-1.6-3.0	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.0-3.0-3.6	none	---	occasional	long	0.0-0.5-1.0
	wet	2.0-3.0-3.6	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.5-2.0	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.5-2.0	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-1.0	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.0	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.5-2.0	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.5-2.0	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.3-1.3-2.6	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.3-1.3-2.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.0-2.1-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.0-2.1-3.3	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.0-3.0-3.8	none	---	rare	very brief	0.0-0.3-0.5
	wet	2.0-3.0-3.8	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.0-2.1-3.3	none	---	rare	brief	0.0-0.3-0.5
	wet	1.0-2.1-3.3	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.7-1.6-2.6	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.7-1.6-2.6	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.3-1.3-2.0	none	---	occasional	long	0.0-0.5-1.0
	wet	0.3-1.3-2.0	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.7-1.6-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.7-1.6-2.5	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I56A (continued)

Deerwood (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	occasional	long	0.0-0.5-1.0
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.6-2.5-4.1	none	---	occasional	long	0.0-0.5-1.0
	wet	1.6-2.5-4.1	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-2.5	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.5-1.6	none	---	frequent	brief	0.0-0.5-1.0
	wet	0.0-0.5-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.2-0.8-2.5	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.2-0.8-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.5-1.3-3.0	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-1.3-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.3-0.8-2.5	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.3-0.8-2.5	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.0-0.3-1.6	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.3-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					

Syrene (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.0-3.0-4.9	none	---	none	---	---
	wet	2.0-3.0-4.9	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-5.7	none	---	none	---	---
	wet	2.5-3.3-5.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.5-4.1	none	---	none	---	---
	wet	1.6-2.5-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.3-2.5	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.0-0.3-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	1.0-1.6-2.5	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.0-1.6-2.5	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-2.5-4.9	none	---	none	---	---
	wet	1.6-2.5-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.3-5.7	none	---	none	---	---
	wet	2.5-3.3-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.3-2.5-4.9	none	---	none	---	---
	wet	1.3-2.5-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.0-2.1-4.1	none	---	none	---	---
	wet	1.0-2.1-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I56A (continued)

Ulen (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.6-3.3-5.9	none	---	none	---	---
	wet	2.6-3.3-5.9	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	3.3-4.1-6.7	none	---	none	---	---
	wet	3.3-4.1-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	2.6-3.3-5.7	none	---	none	---	---
	wet	2.6-3.3-5.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.5-2.0-3.3	none	---	none	---	---
	wet	1.5-2.0-3.3	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.0-2.5-4.1	none	---	none	---	---
	wet	2.0-2.5-4.1	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.5-3.0-4.9					
July	wet	2.5-3.0-4.9	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.5					
August	moist	0.0-0.0-0.5	3.0-4.9-6.2	none	---	none	---	---
	wet	3.0-4.9-6.2	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
	moist	0.0-0.0-0.7	6.7-6.7-6.7					
October	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	2.6-4.9-6.7					
November	wet	2.6-4.9-6.7	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.0	2.3-3.0-5.7					
December	wet	2.3-3.0-5.7	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.0	2.0-2.5-4.9					

Strathcona (1 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I56A (continued)

Thiefriever (1 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.0-2.6-4.9	none	---	none	---	---
	wet	2.0-2.6-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.5-2.3-4.9	none	---	none	---	---
	wet	1.5-2.3-4.9	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.0-3.9	none	---	none	---	---
	wet	1.3-2.0-3.9	6.7-6.7-6.7					

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I57B Sandberg-Radium complex, 1 to 6 percent slopes

Sandberg (50 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
February	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
March	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
April	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
May	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
	moist	0.0-0.0-0.7	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-1.0	none	---	none	---	---
	moist	0.0-0.0-1.0	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-1.0	none	---	none	---	---
	moist	0.0-0.0-1.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
November	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---
December	moist	0.0-0.0-0.0	6.7-6.7-6.7	none	---	none	---	---

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I57B (continued)

Radium (25 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	4.9	5.4	6.7	none	---	none	---	---	---	---
	wet	4.9	5.4	6.7	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	5.7	6.2	6.7	none	---	none	---	---	---	---
	wet	5.7	6.2	6.7	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	3.3	4.1	6.7	none	---	none	---	---	---	---
	wet	3.3	4.1	6.7	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	2.1	3.0	4.9	none	---	none	---	---	---	---
	wet	2.1	3.0	4.9	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	2.6	3.8	5.7	none	---	none	---	---	---	---
	wet	2.6	3.8	5.7	6.7	6.7	6.7							
June	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	---
	moist	0.0	0.0	0.3	3.3	4.4	6.7							
	wet	3.3	4.4	6.7	6.7	6.7	6.7							
July	dry	0.0	0.0	0.0	0.0	0.0	0.7	none	---	none	---	---	---	---
	moist	0.0	0.0	0.7	6.7	6.7	6.7							
August	dry	0.0	0.0	0.0	0.0	0.0	1.0	none	---	none	---	---	---	---
	moist	0.0	0.0	1.0	6.7	6.7	6.7							
September	dry	0.0	0.0	0.0	0.0	0.0	0.7	none	---	none	---	---	---	---
	moist	0.0	0.0	0.7	4.1	4.9	6.7							
October	wet	4.1	4.9	6.7	6.7	6.7	6.7							
	moist	0.0	0.0	0.0	3.3	4.6	6.7	none	---	none	---	---	---	---
November	wet	3.3	4.6	6.7	6.7	6.7	6.7							
	moist	0.0	0.0	0.0	2.5	4.1	5.7	none	---	none	---	---	---	---
December	wet	2.5	4.1	5.7	6.7	6.7	6.7							
	moist	0.0	0.0	0.0	4.1	4.9	6.7	none	---	none	---	---	---	---
	wet	4.1	4.9	6.7	6.7	6.7	6.7							

Sioux (8 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	6.7	6.7	6.7	none	---	none	---	---	---	---
February	moist	0.0	0.0	0.0	6.7	6.7	6.7	none	---	none	---	---	---	---
March	moist	0.0	0.0	0.0	6.7	6.7	6.7	none	---	none	---	---	---	---
April	moist	0.0	0.0	0.0	6.7	6.7	6.7	none	---	none	---	---	---	---
May	dry	0.0	0.0	0.0	0.0	0.0	0.2	none	---	none	---	---	---	---
	moist	0.0	0.0	0.2	6.7	6.7	6.7							
June	dry	0.0	0.0	0.0	0.0	0.0	0.7	none	---	none	---	---	---	---
	moist	0.0	0.0	0.7	6.7	6.7	6.7							
July	dry	0.0	0.0	0.0	0.0	0.0	1.0	none	---	none	---	---	---	---
	moist	0.0	0.0	1.0	6.7	6.7	6.7							
August	dry	0.0	0.0	0.0	0.0	0.0	1.1	none	---	none	---	---	---	---
	moist	0.0	0.0	1.1	6.7	6.7	6.7							
September	dry	0.0	0.0	0.0	0.0	0.0	1.0	none	---	none	---	---	---	---
	moist	0.0	0.0	1.0	6.7	6.7	6.7							
October	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	---
	moist	0.0	0.0	0.3	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	6.7	6.7	6.7	none	---	none	---	---	---	---
December	moist	0.0	0.0	0.0	6.7	6.7	6.7	none	---	none	---	---	---	---
	moist	0.0	0.0	0.0	6.7	6.7	6.7							

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I57B (continued)

Oylen (7 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.9-5.4-6.7	none	---	none	---	---
	wet	4.9-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	5.7-6.2-6.7	none	---	none	---	---
	wet	5.7-6.2-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.1-6.7	none	---	none	---	---
	wet	3.3-4.1-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	2.1-3.0-4.9	none	---	none	---	---
	wet	2.1-3.0-4.9	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.6-3.8-5.7	none	---	none	---	---
	wet	2.6-3.8-5.7	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	3.3-4.4-6.7					
	wet	3.3-4.4-6.7	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
	moist	0.0-0.0-0.7	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-1.0	none	---	none	---	---
	moist	0.0-0.0-1.0	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
	moist	0.0-0.0-0.7	4.1-4.9-6.7					
	wet	4.1-4.9-6.7	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	4.1-4.9-6.7	none	---	none	---	---
	wet	4.1-4.9-6.7	6.7-6.7-6.7					

Flaming (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.6-5.4-6.7	none	---	none	---	---
	wet	4.6-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	5.2-6.2-6.7	none	---	none	---	---
	wet	5.2-6.2-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.1-6.7	none	---	none	---	---
	wet	3.3-4.1-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	2.1-2.5-6.7	none	---	none	---	---
	wet	2.1-2.5-6.7	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.5-2.8-5.7	none	---	none	---	---
	wet	2.5-2.8-5.7	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.6-3.3-6.7					
	wet	2.6-3.3-6.7	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
	moist	0.0-0.0-0.7	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-1.0	none	---	none	---	---
	moist	0.0-0.0-1.0	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	4.1-4.9-6.7					
	wet	4.1-4.9-6.7	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	4.1-4.9-6.7	none	---	none	---	---
	wet	4.1-4.9-6.7	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I57B (continued)

Garborg (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.6-3.3-5.9	none	---	none	---	---
	wet	2.6-3.3-5.9	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	3.3-4.1-6.7	none	---	none	---	---
	wet	3.3-4.1-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	2.6-3.3-5.7	none	---	none	---	---
	wet	2.6-3.3-5.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.1-1.5-3.3	none	---	none	---	---
	wet	1.1-1.5-3.3	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	1.5-1.8-4.1	none	---	none	---	---
	wet	1.5-1.8-4.1	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.0-2.5-4.9					
	wet	2.0-2.5-4.9	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	2.6-4.9-6.2					
	wet	2.6-4.9-6.2	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
	moist	0.0-0.0-0.7	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.6-4.9-6.7					
	wet	2.6-4.9-6.7	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	2.3-3.0-5.7	none	---	none	---	---
	wet	2.3-3.0-5.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.0-2.5-4.9	none	---	none	---	---
	wet	2.0-2.5-4.9	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	2.3-3.0-5.2	none	---	none	---	---
	wet	2.3-3.0-5.2	6.7-6.7-6.7					

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I58A Seelyeville muck, 0 to 1 percent slopes

Seelyeville (90 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.5-1.0-3.3	none	---	occasional	long	0.0-0.3-0.5
	wet	0.5-1.0-3.3	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.3-1.6-4.1	none	---	occasional	long	0.0-0.3-0.5
	wet	1.3-1.6-4.1	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-2.5	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.3-1.6	none	---	frequent	brief	0.0-0.5-1.0
	wet	0.0-0.3-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.0-0.8-2.5	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.0-0.8-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.5-1.6-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-1.6-3.3	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.3-1.1-3.0	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.3-1.1-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.0-0.3-1.6	none	---	occasional	long	0.0-0.3-0.5
	wet	0.0-0.3-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.5-0.8-2.5	none	---	occasional	long	0.0-0.3-0.5
	wet	0.5-0.8-2.5	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I58A (continued)

Cathro (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.5-1.3-3.3	none	---	occasional	long	0.0-0.3-0.5
	wet	0.5-1.3-3.3	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	occasional	long	0.0-0.3-0.5
	wet	1.3-2.1-4.1	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-2.5	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.0-1.6	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.2-0.8-2.5	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.2-0.8-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.3-1.1-3.0	none	---	rare	brief	0.0-0.3-0.5
	wet	0.3-1.1-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.2-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.2-0.5-2.5	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.0-0.3-1.6	none	---	occasional	long	0.0-0.3-0.5
	wet	0.0-0.3-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.5-0.8-2.5	none	---	occasional	long	0.0-0.3-0.5
	wet	0.5-0.8-2.5	6.7-6.7-6.7					

Dora (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.5-1.3-3.3	none	---	occasional	long	0.0-0.3-0.5
	wet	0.5-1.3-3.3	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	occasional	long	0.0-0.3-0.5
	wet	1.3-2.1-4.1	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-2.5	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.0-1.6	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.2-0.8-2.5	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.2-0.8-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.3-1.1-3.0	none	---	rare	brief	0.0-0.3-0.5
	wet	0.3-1.1-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.2-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.2-0.5-2.5	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.0-0.3-1.6	none	---	occasional	long	0.0-0.3-0.5
	wet	0.0-0.3-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.5-0.8-2.5	none	---	occasional	long	0.0-0.3-0.5
	wet	0.5-0.8-2.5	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I58A (continued)

Markey (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.5-1.3-3.3	none	---	occasional	long	0.0-0.3-0.5
	wet	0.5-1.3-3.3	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	occasional	long	0.0-0.3-0.5
	wet	1.3-2.1-4.1	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-2.5	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.0-1.6	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.2-0.8-2.5	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.2-0.8-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.3-1.1-3.0	none	---	rare	brief	0.0-0.3-0.5
	wet	0.3-1.1-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.2-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.2-0.5-2.5	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.0-0.3-1.6	none	---	occasional	long	0.0-0.3-0.5
	wet	0.0-0.3-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.5-0.8-2.5	none	---	occasional	long	0.0-0.3-0.5
	wet	0.5-0.8-2.5	6.7-6.7-6.7					

Berner (1 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.5-1.3-3.3	none	---	occasional	long	0.0-0.3-0.5
	wet	0.5-1.3-3.3	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	occasional	long	0.0-0.3-0.5
	wet	1.3-2.1-4.1	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-2.5	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.0-1.6	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.2-0.8-2.5	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.2-0.8-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.3-1.1-3.0	none	---	rare	brief	0.0-0.3-0.5
	wet	0.3-1.1-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.2-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.2-0.5-2.5	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.0-0.3-1.6	none	---	occasional	long	0.0-0.3-0.5
	wet	0.0-0.3-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.5-0.8-2.5	none	---	occasional	long	0.0-0.3-0.5
	wet	0.5-0.8-2.5	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

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I59A Smiley loam, 0 to 2 percent slopes

Smiley (65 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.3-2.1-3.3	none	---	none	---	---
	wet	1.3-2.1-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.3-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.3-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.7-1.3-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.7-1.3-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	2.0-3.3-4.9	none	---	rare	very brief	0.0-0.3-0.5
	wet	2.0-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.3-1.6-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Smiley, very cobbly (10 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.3-2.1-3.3	none	---	none	---	---
	wet	1.3-2.1-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.3-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.3-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.7-1.3-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.7-1.3-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	2.0-3.3-4.9	none	---	rare	very brief	0.0-0.3-0.5
	wet	2.0-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.3-1.6-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I59A (continued)

Kratka (9 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Roliss (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.3-2.1-3.3	none	---	none	---	---
	wet	1.3-2.1-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.3-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.3-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.7-1.3-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.7-1.3-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	2.0-3.3-4.9	none	---	rare	very brief	0.0-0.3-0.5
	wet	2.0-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.3-1.6-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I59A (continued)

Reiner (4 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.1-5.4-6.7	none	---	none	---	---
	wet	4.1-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	4.9-5.9-6.7	none	---	none	---	---
	wet	4.9-5.9-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.9-6.7	none	---	none	---	---
	wet	3.3-4.9-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.6-2.5-4.1	none	---	none	---	---
	wet	1.6-2.5-4.1	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.1-2.8-4.9	none	---	none	---	---
	wet	2.1-2.8-4.9	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	2.6-3.1-5.7	none	---	none	---	---
	wet	2.6-3.1-5.7	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	3.3-5.7-6.7					
	wet	3.3-5.7-6.7	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	4.9-6.7-6.7					
September	wet	4.9-6.7-6.7	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.3					
	moist	0.0-0.0-0.3	3.6-4.9-6.7					
October	wet	3.6-4.9-6.7	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.0	3.0-4.3-5.7					
November	wet	3.0-4.3-5.7	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.0	2.3-3.3-4.9					
December	wet	2.3-3.3-4.9	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.0	3.3-4.6-5.7					
	wet	3.3-4.6-5.7	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I59A (continued)

Linveltdt (3 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	4.8	5.4	6.7	none	---	none	---	---	---	---
	wet	4.8	5.4	6.7	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	5.2	5.7	6.7	none	---	none	---	---	---	---
	wet	5.2	5.7	6.7	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	3.3	4.6	6.7	none	---	none	---	---	---	---
	wet	3.3	4.6	6.7	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	1.3	2.5	4.9	none	---	none	---	---	---	---
	wet	1.3	2.5	4.9	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	2.0	3.0	5.6	none	---	none	---	---	---	---
	wet	2.0	3.0	5.6	6.7	6.7	6.7							
June	dry	0.0	0.0	0.0	0.0	0.0	0.5	none	---	none	---	---	---	---
	moist	0.0	0.0	0.5	2.6	3.6	6.2							
	wet	2.6	3.6	6.2	6.7	6.7	6.7							
July	dry	0.0	0.0	0.0	0.0	0.0	0.7	none	---	none	---	---	---	---
	moist	0.0	0.0	0.7	3.9	5.4	6.7							
	wet	3.9	5.4	6.7	6.7	6.7	6.7							
August	dry	0.0	0.0	0.0	0.0	0.0	1.0	none	---	none	---	---	---	---
	moist	0.0	0.0	1.0	5.4	6.7	6.7							
	wet	5.4	6.7	6.7	6.7	6.7	6.7							
September	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	---
	moist	0.0	0.0	0.3	4.1	4.6	6.7							
	wet	4.1	4.6	6.7	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	3.6	3.9	6.7	none	---	none	---	---	---	---
	wet	3.6	3.9	6.7	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	2.5	3.3	5.7	none	---	none	---	---	---	---
	wet	2.5	3.3	5.7	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	3.9	4.6	6.2	none	---	none	---	---	---	---
	wet	3.9	4.6	6.2	6.7	6.7	6.7							

Smiley, depressional (3 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	0.8	1.6	3.0	none	---	occasional	long	0.0	0.5	1.0
	wet	0.8	1.6	3.0	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	1.6	2.5	3.3	none	---	occasional	long	0.0	0.5	1.0
	wet	1.6	2.5	3.3	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	0.0	0.0	1.6	none	---	occasional	long	0.0	0.5	1.0
	wet	0.0	0.0	1.6	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	0.0	0.0	0.8	none	---	frequent	long	0.0	0.5	1.0
	wet	0.0	0.0	0.8	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	0.0	0.0	1.6	none	---	frequent	long	0.0	0.5	1.0
	wet	0.0	0.0	1.6	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	0.2	0.8	2.5	none	---	occasional	brief	0.0	0.5	1.0
	wet	0.2	0.8	2.5	6.7	6.7	6.7							
July	moist	0.0	0.0	0.0	0.8	1.6	3.0	none	---	rare	very brief	0.0	0.3	0.5
	wet	0.8	1.6	3.0	6.7	6.7	6.7							
August	moist	0.0	0.0	0.0	1.6	2.1	3.3	none	---	rare	very brief	0.0	0.3	0.5
	wet	1.6	2.1	3.3	6.7	6.7	6.7							
September	moist	0.0	0.0	0.0	0.8	1.6	3.0	none	---	rare	brief	0.0	0.3	0.5
	wet	0.8	1.6	3.0	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	0.5	1.3	2.5	none	---	occasional	brief	0.0	0.3	0.5
	wet	0.5	1.3	2.5	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	0.2	0.5	1.6	none	---	occasional	long	0.0	0.5	1.0
	wet	0.2	0.5	1.6	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	0.3	0.8	2.0	none	---	occasional	long	0.0	0.5	1.0
	wet	0.3	0.8	2.0	6.7	6.7	6.7							

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I59A (continued)

Strandquist (1 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth			
		L	R	H	L	R	H					L	R	H	
January	moist	0.0	0.0	0.0	1.6	3.0	4.1	none	---	none	---	---			
	wet	1.6	3.0	4.1	6.7	6.7	6.7								
February	moist	0.0	0.0	0.0	2.5	3.3	4.9	none	---	none	---	---			
	wet	2.5	3.3	4.9	6.7	6.7	6.7								
March	moist	0.0	0.0	0.0	1.6	2.1	4.1	none	---	none	---	---			
	wet	1.6	2.1	4.1	6.7	6.7	6.7								
April	moist	0.0	0.0	0.0	0.0	0.5	2.5	none	---	occasional	brief		0.0	0.3	0.5
	wet	0.0	0.5	2.5	6.7	6.7	6.7								
May	moist	0.0	0.0	0.0	0.5	0.8	3.3	none	---	occasional	very brief		0.0	0.3	0.5
	wet	0.5	0.8	3.3	6.7	6.7	6.7								
June	moist	0.0	0.0	0.0	0.8	1.6	4.1	none	---	rare	very brief		0.0	0.3	0.5
	wet	0.8	1.6	4.1	6.7	6.7	6.7								
July	moist	0.0	0.0	0.0	1.6	3.3	4.9	none	---	none	---	---			
	wet	1.6	3.3	4.9	6.7	6.7	6.7								
August	moist	0.0	0.0	0.0	2.5	4.1	5.7	none	---	none	---	---			
	wet	2.5	4.1	5.7	6.7	6.7	6.7								
September	moist	0.0	0.0	0.0	1.6	3.3	4.9	none	---	none	---	---			
	wet	1.6	3.3	4.9	6.7	6.7	6.7								
October	moist	0.0	0.0	0.0	1.3	2.5	4.1	none	---	rare	very brief		0.0	0.3	0.5
	wet	1.3	2.5	4.1	6.7	6.7	6.7								
November	moist	0.0	0.0	0.0	0.8	1.6	3.3	none	---	none	---	---			
	wet	0.8	1.6	3.3	6.7	6.7	6.7								
December	moist	0.0	0.0	0.0	1.3	2.1	3.8	none	---	none	---	---			
	wet	1.3	2.1	3.8	6.7	6.7	6.7								

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I60A Smiley mucky loam, depressionnal, 0 to 1 percent slopes

Smiley, depressionnal (80 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth			
		L	R	H	L	R	H					L	R	H	
January	moist	0.0	0.0	0.0	0.8	1.6	3.0	none	---	occasional	long		0.0	0.5	1.0
	wet	0.8	1.6	3.0	6.7	6.7	6.7								
February	moist	0.0	0.0	0.0	1.6	2.5	3.3	none	---	occasional	long		0.0	0.5	1.0
	wet	1.6	2.5	3.3	6.7	6.7	6.7								
March	moist	0.0	0.0	0.0	0.0	0.0	1.6	none	---	occasional	long		0.0	0.5	1.0
	wet	0.0	0.0	1.6	6.7	6.7	6.7								
April	moist	0.0	0.0	0.0	0.0	0.0	0.8	none	---	frequent	long		0.0	0.5	1.0
	wet	0.0	0.0	0.8	6.7	6.7	6.7								
May	moist	0.0	0.0	0.0	0.0	0.0	1.6	none	---	frequent	long		0.0	0.5	1.0
	wet	0.0	0.0	1.6	6.7	6.7	6.7								
June	moist	0.0	0.0	0.0	0.2	0.8	2.5	none	---	occasional	brief		0.0	0.5	1.0
	wet	0.2	0.8	2.5	6.7	6.7	6.7								
July	moist	0.0	0.0	0.0	0.8	1.6	3.0	none	---	rare	very brief		0.0	0.3	0.5
	wet	0.8	1.6	3.0	6.7	6.7	6.7								
August	moist	0.0	0.0	0.0	1.6	2.1	3.3	none	---	rare	very brief		0.0	0.3	0.5
	wet	1.6	2.1	3.3	6.7	6.7	6.7								
September	moist	0.0	0.0	0.0	0.8	1.6	3.0	none	---	rare	brief		0.0	0.3	0.5
	wet	0.8	1.6	3.0	6.7	6.7	6.7								
October	moist	0.0	0.0	0.0	0.5	1.3	2.5	none	---	occasional	brief		0.0	0.3	0.5
	wet	0.5	1.3	2.5	6.7	6.7	6.7								
November	moist	0.0	0.0	0.0	0.2	0.5	1.6	none	---	occasional	long		0.0	0.5	1.0
	wet	0.2	0.5	1.6	6.7	6.7	6.7								
December	moist	0.0	0.0	0.0	0.3	0.8	2.0	none	---	occasional	long		0.0	0.5	1.0
	wet	0.3	0.8	2.0	6.7	6.7	6.7								

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I60A (continued)

Smiley (10 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.3-2.1-3.3	none	---	none	---	---
	wet	1.3-2.1-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.3-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.3-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.7-1.3-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.7-1.3-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	2.0-3.3-4.9	none	---	rare	very brief	0.0-0.3-0.5
	wet	2.0-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.3-1.6-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Hamre (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	occasional	long	0.0-0.5-1.0
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.6-2.5-4.1	none	---	occasional	long	0.0-0.5-1.0
	wet	1.6-2.5-4.1	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-2.5	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.5-1.6	none	---	frequent	brief	0.0-0.5-1.0
	wet	0.0-0.5-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.2-0.8-2.5	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.2-0.8-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.5-1.3-3.0	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-1.3-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.3-0.8-2.5	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.3-0.8-2.5	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.0-0.3-1.6	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.3-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I60A (continued)

Kratka (5 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth			
		L	R	H	L	R	H					L	R	H	
January	moist	0.0	0.0	0.0	1.6	3.0	4.1	none	---	none	---	---			
	wet	1.6	3.0	4.1	6.7	6.7	6.7								
February	moist	0.0	0.0	0.0	2.5	3.3	4.9	none	---	none	---	---			
	wet	2.5	3.3	4.9	6.7	6.7	6.7								
March	moist	0.0	0.0	0.0	1.6	2.1	4.1	none	---	none	---	---			
	wet	1.6	2.1	4.1	6.7	6.7	6.7								
April	moist	0.0	0.0	0.0	0.0	0.5	2.5	none	---	occasional	brief	0.0-0.3-0.5			
	wet	0.0	0.5	2.5	6.7	6.7	6.7								
May	moist	0.0	0.0	0.0	0.5	0.8	3.3	none	---	occasional	very brief	0.0-0.3-0.5			
	wet	0.5	0.8	3.3	6.7	6.7	6.7								
June	moist	0.0	0.0	0.0	0.8	1.6	4.1	none	---	rare	very brief	0.0-0.1-0.3			
	wet	0.8	1.6	4.1	6.7	6.7	6.7								
July	moist	0.0	0.0	0.0	1.6	3.3	4.9	none	---	none	---	---			
	wet	1.6	3.3	4.9	6.7	6.7	6.7								
August	moist	0.0	0.0	0.0	2.5	4.1	5.7	none	---	none	---	---			
	wet	2.5	4.1	5.7	6.7	6.7	6.7								
September	moist	0.0	0.0	0.0	1.6	3.3	4.9	none	---	none	---	---			
	wet	1.6	3.3	4.9	6.7	6.7	6.7								
October	moist	0.0	0.0	0.0	1.3	2.5	4.1	none	---	rare	very brief	0.0-0.1-0.3			
	wet	1.3	2.5	4.1	6.7	6.7	6.7								
November	moist	0.0	0.0	0.0	0.8	1.6	3.3	none	---	rare	very brief	0.0-0.1-0.3			
	wet	0.8	1.6	3.3	6.7	6.7	6.7								
December	moist	0.0	0.0	0.0	1.3	2.1	3.8	none	---	none	---	---			
	wet	1.3	2.1	3.8	6.7	6.7	6.7								

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I61A Strandquist loam, 0 to 2 percent slopes

Strandquist (70 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth			
		L	R	H	L	R	H					L	R	H	
January	moist	0.0	0.0	0.0	1.6	3.0	4.1	none	---	none	---	---			
	wet	1.6	3.0	4.1	6.7	6.7	6.7								
February	moist	0.0	0.0	0.0	2.5	3.3	4.9	none	---	none	---	---			
	wet	2.5	3.3	4.9	6.7	6.7	6.7								
March	moist	0.0	0.0	0.0	1.6	2.1	4.1	none	---	none	---	---			
	wet	1.6	2.1	4.1	6.7	6.7	6.7								
April	moist	0.0	0.0	0.0	0.0	0.5	2.5	none	---	occasional	brief	0.0-0.3-0.5			
	wet	0.0	0.5	2.5	6.7	6.7	6.7								
May	moist	0.0	0.0	0.0	0.5	0.8	3.3	none	---	occasional	very brief	0.0-0.3-0.5			
	wet	0.5	0.8	3.3	6.7	6.7	6.7								
June	moist	0.0	0.0	0.0	0.8	1.6	4.1	none	---	rare	very brief	0.0-0.3-0.5			
	wet	0.8	1.6	4.1	6.7	6.7	6.7								
July	moist	0.0	0.0	0.0	1.6	3.3	4.9	none	---	none	---	---			
	wet	1.6	3.3	4.9	6.7	6.7	6.7								
August	moist	0.0	0.0	0.0	2.5	4.1	5.7	none	---	none	---	---			
	wet	2.5	4.1	5.7	6.7	6.7	6.7								
September	moist	0.0	0.0	0.0	1.6	3.3	4.9	none	---	none	---	---			
	wet	1.6	3.3	4.9	6.7	6.7	6.7								
October	moist	0.0	0.0	0.0	1.3	2.5	4.1	none	---	rare	very brief	0.0-0.3-0.5			
	wet	1.3	2.5	4.1	6.7	6.7	6.7								
November	moist	0.0	0.0	0.0	0.8	1.6	3.3	none	---	none	---	---			
	wet	0.8	1.6	3.3	6.7	6.7	6.7								
December	moist	0.0	0.0	0.0	1.3	2.1	3.8	none	---	none	---	---			
	wet	1.3	2.1	3.8	6.7	6.7	6.7								

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I61A (continued)

Mavie (8 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Roliss (7 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.3-2.1-3.3	none	---	none	---	---
	wet	1.3-2.1-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.3-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.3-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.7-1.3-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.7-1.3-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	2.0-3.3-4.9	none	---	rare	very brief	0.0-0.3-0.5
	wet	2.0-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.3-1.6-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I61A (continued)

Kratka (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Foxhorne (4 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.8-5.4-6.7	none	---	none	---	---
	wet	4.8-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	5.2-5.7-6.7	none	---	none	---	---
	wet	5.2-5.7-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.3-2.5-4.9	none	---	none	---	---
	wet	1.3-2.5-4.9	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.0-3.0-5.6	none	---	none	---	---
	wet	2.0-3.0-5.6	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	2.6-3.6-6.2					
July	wet	2.6-3.6-6.2	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.7					
August	moist	0.0-0.0-0.7	3.9-5.4-6.7	none	---	none	---	---
	wet	3.9-5.4-6.7	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-1.0	none	---	none	---	---
	moist	0.0-0.0-1.0	5.4-6.7-6.7					
October	wet	5.4-6.7-6.7	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.3					
November	moist	0.0-0.0-0.3	4.1-4.6-6.7	none	---	none	---	---
	wet	4.1-4.6-6.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.6-3.9-6.7	none	---	none	---	---
	wet	3.6-3.9-6.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.5-3.3-5.7	none	---	none	---	---
	wet	2.5-3.3-5.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.9-4.6-6.2	none	---	none	---	---
	wet	3.9-4.6-6.2	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I61A (continued)

Hangaard (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.0-3.0-4.9	none	---	none	---	---
	wet	2.0-3.0-4.9	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-5.7	none	---	none	---	---
	wet	2.5-3.3-5.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.5-4.1	none	---	none	---	---
	wet	1.6-2.5-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.3-2.5	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.0-0.3-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	1.0-1.6-2.5	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.0-1.6-2.5	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-2.5-4.9	none	---	none	---	---
	wet	1.6-2.5-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.3-5.7	none	---	none	---	---
	wet	2.5-3.3-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.3-2.5-4.9	none	---	none	---	---
	wet	1.3-2.5-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.0-2.1-4.1	none	---	none	---	---
	wet	1.0-2.1-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					

Northwood (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	occasional	long	0.0-0.5-1.0
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.6-2.5-4.1	none	---	occasional	long	0.0-0.5-1.0
	wet	1.6-2.5-4.1	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-2.5	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.5-1.6	none	---	frequent	brief	0.0-0.5-1.0
	wet	0.0-0.5-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.2-0.8-2.5	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.2-0.8-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.5-1.3-3.0	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-1.3-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.3-0.8-2.5	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.3-0.8-2.5	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.0-0.3-1.6	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.3-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

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I62A Syrene sandy loam, 0 to 2 percent slopes

Syrene (70 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.0-3.0-4.9	none	---	none	---	---
	wet	2.0-3.0-4.9	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-5.7	none	---	none	---	---
	wet	2.5-3.3-5.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.5-4.1	none	---	none	---	---
	wet	1.6-2.5-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.3-2.5	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.0-0.3-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	1.0-1.6-2.5	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.0-1.6-2.5	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-2.5-4.9	none	---	none	---	---
	wet	1.6-2.5-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.3-5.7	none	---	none	---	---
	wet	2.5-3.3-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.3-2.5-4.9	none	---	none	---	---
	wet	1.3-2.5-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.0-2.1-4.1	none	---	none	---	---
	wet	1.0-2.1-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					

Rosewood (11 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.0-2.5-4.9	none	---	none	---	---
	wet	2.0-2.5-4.9	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-5.7	none	---	none	---	---
	wet	2.5-3.3-5.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-1.3-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-1.3-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.9-5.7	none	---	none	---	---
	wet	2.5-4.9-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.3-3.0-4.9	none	---	none	---	---
	wet	1.3-3.0-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.0-2.1-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.0-2.1-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	none	---	---
	wet	1.3-2.1-4.1	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I62A (continued)

Hangaard (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.0-3.0-4.9	none	---	none	---	---
	wet	2.0-3.0-4.9	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-5.7	none	---	none	---	---
	wet	2.5-3.3-5.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.5-4.1	none	---	none	---	---
	wet	1.6-2.5-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.3-2.5	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.0-0.3-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	1.0-1.6-2.5	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.0-1.6-2.5	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-2.5-4.9	none	---	none	---	---
	wet	1.6-2.5-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.3-5.7	none	---	none	---	---
	wet	2.5-3.3-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.3-2.5-4.9	none	---	none	---	---
	wet	1.3-2.5-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.0-2.1-4.1	none	---	none	---	---
	wet	1.0-2.1-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					

Karlsruhe (4 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.6-3.3-6.2	none	---	none	---	---
	wet	2.6-3.3-6.2	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	3.3-4.1-6.7	none	---	none	---	---
	wet	3.3-4.1-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	2.6-3.3-5.9	none	---	none	---	---
	wet	2.6-3.3-5.9	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.5-2.0-3.3	none	---	none	---	---
	wet	1.5-2.0-3.3	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	1.8-2.5-4.1	none	---	none	---	---
	wet	1.8-2.5-4.1	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	2.5-3.0-4.9	none	---	none	---	---
	wet	2.5-3.0-4.9	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	3.0-3.6-6.7					
	wet	3.0-3.6-6.7	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	4.1-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.6-4.1-6.7					
October	moist	0.0-0.0-0.0	3.0-4.3-5.7	none	---	none	---	---
	wet	3.0-4.3-5.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.0-2.5-4.9	none	---	none	---	---
	wet	2.0-2.5-4.9	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	2.3-3.0-5.6	none	---	none	---	---
	wet	2.3-3.0-5.6	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I62A (continued)

Deerwood (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	occasional	long	0.0-0.5-1.0
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.6-2.5-4.1	none	---	occasional	long	0.0-0.5-1.0
	wet	1.6-2.5-4.1	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-2.5	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.5-1.6	none	---	frequent	brief	0.0-0.5-1.0
	wet	0.0-0.5-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.2-0.8-2.5	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.2-0.8-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.5-1.3-3.0	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-1.3-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.3-0.8-2.5	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.3-0.8-2.5	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.0-0.3-1.6	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.3-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					

Hamar (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.0-2.5-4.9	none	---	none	---	---
	wet	2.0-2.5-4.9	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-5.7	none	---	none	---	---
	wet	2.5-3.3-5.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-1.3-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-1.3-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.9-5.7	none	---	none	---	---
	wet	2.5-4.9-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.3-3.0-4.9	none	---	none	---	---
	wet	1.3-3.0-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.0-2.1-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.0-2.1-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	none	---	---
	wet	1.3-2.1-4.1	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I62A (continued)

Strandquist (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Radium (1 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.9-5.4-6.7	none	---	none	---	---
	wet	4.9-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	5.7-6.2-6.7	none	---	none	---	---
	wet	5.7-6.2-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.1-6.7	none	---	none	---	---
	wet	3.3-4.1-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	2.1-3.0-4.9	none	---	none	---	---
	wet	2.1-3.0-4.9	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.6-3.8-5.7	none	---	none	---	---
	wet	2.6-3.8-5.7	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	3.3-4.4-6.7					
July	wet	3.3-4.4-6.7	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.7					
August	moist	0.0-0.0-0.7	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-1.0					
September	moist	0.0-0.0-1.0	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.7					
October	moist	0.0-0.0-0.7	4.1-4.9-6.7	none	---	none	---	---
	wet	4.1-4.9-6.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	4.1-4.9-6.7	none	---	none	---	---
	wet	4.1-4.9-6.7	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I62A (continued)

Wyandotte (1 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.0-2.6-4.9	none	---	none	---	---
	wet	2.0-2.6-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.5-2.3-4.1	none	---	none	---	---
	wet	1.5-2.3-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.0-3.9	none	---	none	---	---
	wet	1.3-2.0-3.9	6.7-6.7-6.7					

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I63A Thiefriver fine sandy loam, 0 to 2 percent slopes

Thiefriver (70 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.0-2.6-4.9	none	---	none	---	---
	wet	2.0-2.6-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.5-2.3-4.9	none	---	none	---	---
	wet	1.5-2.3-4.9	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.0-3.9	none	---	none	---	---
	wet	1.3-2.0-3.9	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I63A (continued)

Espelie (10 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.0-2.6-4.9	none	---	none	---	---
	wet	2.0-2.6-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.5-2.3-4.9	none	---	none	---	---
	wet	1.5-2.3-4.9	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.0-3.9	none	---	none	---	---
	wet	1.3-2.0-3.9	6.7-6.7-6.7					

Foxlake (7 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.8-2.1-4.1	none	---	none	---	---
	wet	0.8-2.1-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.6-2.5-4.9	none	---	none	---	---
	wet	1.6-2.5-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.3-1.3-3.3	none	---	none	---	---
	wet	0.3-1.3-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-1.6	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.3-2.1-4.1	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	occasional	very brief	0.0-0.2-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I63A (continued)

Huot (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.6-5.4-6.7	none	---	none	---	---
	wet	4.6-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	4.9-5.7-6.7	none	---	none	---	---
	wet	4.9-5.7-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.6-2.5-4.6	none	---	none	---	---
	wet	1.6-2.5-4.6	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.3-3.0-5.2	none	---	none	---	---
	wet	2.3-3.0-5.2	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.8-3.8-6.2					
	wet	2.8-3.8-6.2	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	3.8-4.6-6.7					
	wet	3.8-4.6-6.7	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
	moist	0.0-0.0-0.7	5.2-6.7-6.7					
	wet	5.2-6.7-6.7	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	3.8-4.1-6.7					
	wet	3.8-4.1-6.7	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	3.3-3.8-6.7	none	---	none	---	---
	wet	3.3-3.8-6.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.8-4.1-5.7	none	---	none	---	---
	wet	3.8-4.1-5.7	6.7-6.7-6.7					

Clearwater, depressional (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	long	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	0.8-1.6-3.0	none	---	occasional	long	0.0-0.5-1.0
	wet	0.8-1.6-3.0	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-1.6	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.3	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.0-0.5-1.6	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.5-1.6	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	0.8-1.6-3.0	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.8-1.6-3.0	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.3-0.8-2.0	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.3-0.8-2.0	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.2-0.5-1.6	none	---	occasional	long	0.0-0.5-1.0
	wet	0.2-0.5-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.3-0.8-2.0	none	---	occasional	long	0.0-0.5-1.0
	wet	0.3-0.8-2.0	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I63A (continued)

Rosewood (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.0-2.5-4.9	none	---	none	---	---
	wet	2.0-2.5-4.9	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-5.7	none	---	none	---	---
	wet	2.5-3.3-5.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-1.3-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-1.3-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.9-5.7	none	---	none	---	---
	wet	2.5-4.9-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.3-3.0-4.9	none	---	none	---	---
	wet	1.3-3.0-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.0-2.1-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.0-2.1-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	none	---	---
	wet	1.3-2.1-4.1	6.7-6.7-6.7					

Ulen (1 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.6-3.3-5.9	none	---	none	---	---
	wet	2.6-3.3-5.9	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	3.3-4.1-6.7	none	---	none	---	---
	wet	3.3-4.1-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	2.6-3.3-5.7	none	---	none	---	---
	wet	2.6-3.3-5.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.5-2.0-3.3	none	---	none	---	---
	wet	1.5-2.0-3.3	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.0-2.5-4.1	none	---	none	---	---
	wet	2.0-2.5-4.1	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.5-3.0-4.9					
July	wet	2.5-3.0-4.9	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.5					
August	moist	0.0-0.0-0.5	3.0-4.9-6.2	none	---	none	---	---
	wet	3.0-4.9-6.2	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
	moist	0.0-0.0-0.7	6.7-6.7-6.7					
October	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.6-4.9-6.7					
November	wet	2.6-4.9-6.7	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.0	2.3-3.0-5.7					
December	moist	0.0-0.0-0.0	2.0-2.5-4.9	none	---	none	---	---
	wet	2.0-2.5-4.9	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	2.3-3.0-5.2	none	---	none	---	---
	wet	2.3-3.0-5.2	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I63A (continued)

Wyandotte (1 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.0-2.6-4.9	none	---	none	---	---
	wet	2.0-2.6-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.5-2.3-4.1	none	---	none	---	---
	wet	1.5-2.3-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.0-3.9	none	---	none	---	---
	wet	1.3-2.0-3.9	6.7-6.7-6.7					

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I64A Ulen fine sandy loam, 0 to 3 percent slopes

Ulen (70 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.6-3.3-5.9	none	---	none	---	---
	wet	2.6-3.3-5.9	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	3.3-4.1-6.7	none	---	none	---	---
	wet	3.3-4.1-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	2.6-3.3-5.7	none	---	none	---	---
	wet	2.6-3.3-5.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.5-2.0-3.3	none	---	none	---	---
	wet	1.5-2.0-3.3	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.0-2.5-4.1	none	---	none	---	---
	wet	2.0-2.5-4.1	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.5-3.0-4.9					
July	wet	2.5-3.0-4.9	6.7-6.7-6.7					
	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
August	moist	0.0-0.0-0.5	3.0-4.9-6.2					
	wet	3.0-4.9-6.2	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
	moist	0.0-0.0-0.7	6.7-6.7-6.7					
October	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.6-4.9-6.7					
November	wet	2.6-4.9-6.7	6.7-6.7-6.7					
	moist	0.0-0.0-0.0	2.3-3.0-5.7	none	---	none	---	---
December	wet	2.3-3.0-5.7	6.7-6.7-6.7					
	moist	0.0-0.0-0.0	2.0-2.5-4.9	none	---	none	---	---
December	wet	2.0-2.5-4.9	6.7-6.7-6.7					
	moist	0.0-0.0-0.0	2.3-3.0-5.2	none	---	none	---	---
December	wet	2.3-3.0-5.2	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I64A (continued)

Rosewood (10 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.0-2.5-4.9	none	---	none	---	---
	wet	2.0-2.5-4.9	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-5.7	none	---	none	---	---
	wet	2.5-3.3-5.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-1.3-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-1.3-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.9-5.7	none	---	none	---	---
	wet	2.5-4.9-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.3-3.0-4.9	none	---	none	---	---
	wet	1.3-3.0-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.0-2.1-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.0-2.1-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	none	---	---
	wet	1.3-2.1-4.1	6.7-6.7-6.7					

Flaming (8 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.6-5.4-6.7	none	---	none	---	---
	wet	4.6-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	5.2-6.2-6.7	none	---	none	---	---
	wet	5.2-6.2-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.1-6.7	none	---	none	---	---
	wet	3.3-4.1-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	2.1-2.5-6.7	none	---	none	---	---
	wet	2.1-2.5-6.7	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.5-2.8-5.7	none	---	none	---	---
	wet	2.5-2.8-5.7	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.6-3.3-6.7					
July	wet	2.6-3.3-6.7	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.7					
August	moist	0.0-0.0-0.7	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-1.0					
September	moist	0.0-0.0-1.0	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.3					
October	moist	0.0-0.0-0.3	4.1-4.9-6.7	none	---	none	---	---
	wet	4.1-4.9-6.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	4.1-4.9-6.7	none	---	none	---	---
	wet	4.1-4.9-6.7	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I64A (continued)

Karlsruhe (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.6-3.3-6.2	none	---	none	---	---
	wet	2.6-3.3-6.2	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	3.3-4.1-6.7	none	---	none	---	---
	wet	3.3-4.1-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	2.6-3.3-5.9	none	---	none	---	---
	wet	2.6-3.3-5.9	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.5-2.0-3.3	none	---	none	---	---
	wet	1.5-2.0-3.3	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	1.8-2.5-4.1	none	---	none	---	---
	wet	1.8-2.5-4.1	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	2.5-3.0-4.9	none	---	none	---	---
	wet	2.5-3.0-4.9	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	3.0-3.6-6.7					
	wet	3.0-3.6-6.7	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	4.1-6.7-6.7					
	wet	4.1-6.7-6.7	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.6-4.1-6.7					
October	moist	0.0-0.0-0.0	3.0-4.3-5.7	none	---	none	---	---
	wet	3.0-4.3-5.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.0-2.5-4.9	none	---	none	---	---
	wet	2.0-2.5-4.9	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	2.3-3.0-5.6	none	---	none	---	---
	wet	2.3-3.0-5.6	6.7-6.7-6.7					

Radium (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.9-5.4-6.7	none	---	none	---	---
	wet	4.9-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	5.7-6.2-6.7	none	---	none	---	---
	wet	5.7-6.2-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.1-6.7	none	---	none	---	---
	wet	3.3-4.1-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	2.1-3.0-4.9	none	---	none	---	---
	wet	2.1-3.0-4.9	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.6-3.8-5.7	none	---	none	---	---
	wet	2.6-3.8-5.7	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	3.3-4.4-6.7					
July	wet	3.3-4.4-6.7	6.7-6.7-6.7					
	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
August	moist	0.0-0.0-0.7	6.7-6.7-6.7					
	dry	0.0-0.0-0.0	0.0-0.0-1.0	none	---	none	---	---
September	moist	0.0-0.0-1.0	6.7-6.7-6.7					
	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
	moist	0.0-0.0-0.7	4.1-4.9-6.7					
October	wet	4.1-4.9-6.7	6.7-6.7-6.7					
	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
November	wet	3.3-4.6-6.7	6.7-6.7-6.7					
	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
December	wet	2.5-4.1-5.7	6.7-6.7-6.7					
	moist	0.0-0.0-0.0	4.1-4.9-6.7	none	---	none	---	---
	wet	4.1-4.9-6.7	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I64A (continued)

Strathcona (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Thiefriever (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.0-2.6-4.9	none	---	none	---	---
	wet	2.0-2.6-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.5-2.3-4.9	none	---	none	---	---
	wet	1.5-2.3-4.9	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.0-3.9	none	---	none	---	---
	wet	1.3-2.0-3.9	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

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I65A Ulen loamy fine sand, 0 to 3 percent slopes

Ulen (70 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	2.6	3.3	5.9	none	---	none	---	---	---	---
	wet	2.6	3.3	5.9	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	3.3	4.1	6.7	none	---	none	---	---	---	---
	wet	3.3	4.1	6.7	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	2.6	3.3	5.7	none	---	none	---	---	---	---
	wet	2.6	3.3	5.7	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	1.5	2.0	3.3	none	---	none	---	---	---	---
	wet	1.5	2.0	3.3	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	2.0	2.5	4.1	none	---	none	---	---	---	---
	wet	2.0	2.5	4.1	6.7	6.7	6.7							
June	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	---
	moist	0.0	0.0	0.3	2.5	3.0	4.9							
	wet	2.5	3.0	4.9	6.7	6.7	6.7							
July	dry	0.0	0.0	0.0	0.0	0.0	0.5	none	---	none	---	---	---	---
	moist	0.0	0.0	0.5	3.0	4.9	6.2							
	wet	3.0	4.9	6.2	6.7	6.7	6.7							
August	dry	0.0	0.0	0.0	0.0	0.0	0.7	none	---	none	---	---	---	---
	moist	0.0	0.0	0.7	6.7	6.7	6.7							
September	dry	0.0	0.0	0.0	0.0	0.0	0.5	none	---	none	---	---	---	---
	moist	0.0	0.0	0.5	2.6	4.9	6.7							
October	wet	2.6	4.9	6.7	6.7	6.7	6.7							
	moist	0.0	0.0	0.0	2.3	3.0	5.7	none	---	none	---	---	---	---
November	wet	2.3	3.0	5.7	6.7	6.7	6.7							
	moist	0.0	0.0	0.0	2.0	2.5	4.9	none	---	none	---	---	---	---
December	wet	2.0	2.5	4.9	6.7	6.7	6.7							
	moist	0.0	0.0	0.0	2.3	3.0	5.2	none	---	none	---	---	---	---
	wet	2.3	3.0	5.2	6.7	6.7	6.7							

Rosewood (10 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	2.0	2.5	4.9	none	---	none	---	---	---	---
	wet	2.0	2.5	4.9	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	2.5	3.3	5.7	none	---	none	---	---	---	---
	wet	2.5	3.3	5.7	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	1.6	2.1	4.1	none	---	none	---	---	---	---
	wet	1.6	2.1	4.1	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	0.0	0.5	2.5	none	---	occasional	brief	0.0-0.3-0.5		
	wet	0.0	0.5	2.5	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	0.5	1.3	3.3	none	---	occasional	very brief	0.0-0.3-0.5		
	wet	0.5	1.3	3.3	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	0.8	1.6	4.1	none	---	rare	very brief	0.0-0.3-0.5		
	wet	0.8	1.6	4.1	6.7	6.7	6.7							
July	moist	0.0	0.0	0.0	1.6	3.3	4.9	none	---	none	---	---	---	---
	wet	1.6	3.3	4.9	6.7	6.7	6.7							
August	moist	0.0	0.0	0.0	2.5	4.9	5.7	none	---	none	---	---	---	---
	wet	2.5	4.9	5.7	6.7	6.7	6.7							
September	moist	0.0	0.0	0.0	1.3	3.0	4.9	none	---	none	---	---	---	---
	wet	1.3	3.0	4.9	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	1.0	2.1	4.1	none	---	rare	very brief	0.0-0.3-0.5		
	wet	1.0	2.1	4.1	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	0.8	1.6	3.3	none	---	none	---	---	---	---
	wet	0.8	1.6	3.3	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	1.3	2.1	4.1	none	---	none	---	---	---	---
	wet	1.3	2.1	4.1	6.7	6.7	6.7							

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I65A (continued)

Flaming (6 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.6-5.4-6.7	none	---	none	---	---
	wet	4.6-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	5.2-6.2-6.7	none	---	none	---	---
	wet	5.2-6.2-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.1-6.7	none	---	none	---	---
	wet	3.3-4.1-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	2.1-2.5-6.7	none	---	none	---	---
	wet	2.1-2.5-6.7	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.5-2.8-5.7	none	---	none	---	---
	wet	2.5-2.8-5.7	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.6-3.3-6.7					
	wet	2.6-3.3-6.7	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
	moist	0.0-0.0-0.7	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-1.0	none	---	none	---	---
	moist	0.0-0.0-1.0	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	4.1-4.9-6.7					
October	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	4.1-4.9-6.7	none	---	none	---	---
	wet	4.1-4.9-6.7	6.7-6.7-6.7					

Poppleton (4 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.6-5.4-6.7	none	---	none	---	---
	wet	4.6-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	5.2-6.2-6.7	none	---	none	---	---
	wet	5.2-6.2-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.1-6.7	none	---	none	---	---
	wet	3.3-4.1-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	2.1-2.5-6.7	none	---	none	---	---
	wet	2.1-2.5-6.7	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.5-2.8-5.7	none	---	none	---	---
	wet	2.5-2.8-5.7	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.6-3.3-6.7					
	wet	2.6-3.3-6.7	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
	moist	0.0-0.0-0.7	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-1.0	none	---	none	---	---
	moist	0.0-0.0-1.0	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	4.1-4.9-6.7					
October	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	4.1-4.9-6.7	none	---	none	---	---
	wet	4.1-4.9-6.7	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I65A (continued)

Karlsruhe (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.6-3.3-6.2	none	---	none	---	---
	wet	2.6-3.3-6.2	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	3.3-4.1-6.7	none	---	none	---	---
	wet	3.3-4.1-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	2.6-3.3-5.9	none	---	none	---	---
	wet	2.6-3.3-5.9	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.5-2.0-3.3	none	---	none	---	---
	wet	1.5-2.0-3.3	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	1.8-2.5-4.1	none	---	none	---	---
	wet	1.8-2.5-4.1	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	2.5-3.0-4.9	none	---	none	---	---
	wet	2.5-3.0-4.9	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	3.0-3.6-6.7					
	wet	3.0-3.6-6.7	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	4.1-6.7-6.7					
	wet	4.1-6.7-6.7	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.6-4.1-6.7					
October	moist	0.0-0.0-0.0	3.0-4.3-5.7	none	---	none	---	---
	wet	3.0-4.3-5.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.0-2.5-4.9	none	---	none	---	---
	wet	2.0-2.5-4.9	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	2.3-3.0-5.6	none	---	none	---	---
	wet	2.3-3.0-5.6	6.7-6.7-6.7					

Radium (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.9-5.4-6.7	none	---	none	---	---
	wet	4.9-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	5.7-6.2-6.7	none	---	none	---	---
	wet	5.7-6.2-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.1-6.7	none	---	none	---	---
	wet	3.3-4.1-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	2.1-3.0-4.9	none	---	none	---	---
	wet	2.1-3.0-4.9	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.6-3.8-5.7	none	---	none	---	---
	wet	2.6-3.8-5.7	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	3.3-4.4-6.7					
July	wet	3.3-4.4-6.7	6.7-6.7-6.7					
	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
August	moist	0.0-0.0-0.7	6.7-6.7-6.7					
	dry	0.0-0.0-0.0	0.0-0.0-1.0	none	---	none	---	---
September	moist	0.0-0.0-1.0	6.7-6.7-6.7					
	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
	moist	0.0-0.0-0.7	4.1-4.9-6.7					
October	wet	4.1-4.9-6.7	6.7-6.7-6.7					
	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
November	wet	3.3-4.6-6.7	6.7-6.7-6.7					
	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
December	wet	2.5-4.1-5.7	6.7-6.7-6.7					
	moist	0.0-0.0-0.0	4.1-4.9-6.7	none	---	none	---	---
	wet	4.1-4.9-6.7	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I65A (continued)

Strathcona (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Thiefriever (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.0-2.6-4.9	none	---	none	---	---
	wet	2.0-2.6-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.5-2.3-4.9	none	---	none	---	---
	wet	1.5-2.3-4.9	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.0-3.9	none	---	none	---	---
	wet	1.3-2.0-3.9	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

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I66A Vallers loam, 0 to 2 percent slopes

Vallers (75 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.3-2.1-3.3	none	---	none	---	---
	wet	1.3-2.1-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.3-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.3-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.7-1.3-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.7-1.3-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	2.0-3.3-4.9	none	---	rare	very brief	0.0-0.3-0.5
	wet	2.0-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.3-1.6-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Vallers, very cobbly (7 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.3-2.1-3.3	none	---	none	---	---
	wet	1.3-2.1-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.3-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.3-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.7-1.3-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.7-1.3-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	2.0-3.3-4.9	none	---	rare	very brief	0.0-0.3-0.5
	wet	2.0-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.3-1.6-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I66A (continued)

Hamerly (6 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	2.5	4.1	5.7	none	---	none	---	---	---	
	wet	2.5	4.1	5.7	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	3.3	4.9	6.7	none	---	none	---	---	---	
	wet	3.3	4.9	6.7	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	2.5	3.8	5.7	none	---	none	---	---	---	
	wet	2.5	3.8	5.7	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	0.7	1.3	3.3	none	---	none	---	---	---	
	wet	0.7	1.3	3.3	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	1.0	1.5	4.1	none	---	none	---	---	---	
	wet	1.0	1.5	4.1	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	1.6	2.0	4.9	none	---	none	---	---	---	
	wet	1.6	2.0	4.9	6.7	6.7	6.7							
July	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	
	moist	0.0	0.0	0.3	2.5	3.3	5.4							
August	wet	2.5	3.3	5.4	6.7	6.7	6.7							
	dry	0.0	0.0	0.0	0.0	0.0	0.5	none	---	none	---	---	---	
September	moist	0.0	0.0	0.5	3.3	6.7	6.7							
	wet	3.3	6.7	6.7	6.7	6.7	6.7							
October	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	
	moist	0.0	0.0	0.3	2.5	4.6	5.7							
November	wet	2.5	4.6	5.7	6.7	6.7	6.7							
	moist	0.0	0.0	0.0	2.0	3.9	4.9	none	---	none	---	---	---	
December	wet	2.0	3.9	4.9	6.7	6.7	6.7							
	moist	0.0	0.0	0.0	1.6	3.0	4.1	none	---	none	---	---	---	
December	wet	1.6	3.0	4.1	6.7	6.7	6.7							
	moist	0.0	0.0	0.0	2.0	3.8	4.9	none	---	none	---	---	---	
December	wet	2.0	3.8	4.9	6.7	6.7	6.7							

Grimstad (3 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	2.5	3.8	5.7	none	---	none	---	---	---	
	wet	2.5	3.8	5.7	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	3.3	4.6	6.7	none	---	none	---	---	---	
	wet	3.3	4.6	6.7	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	2.5	3.0	5.7	none	---	none	---	---	---	
	wet	2.5	3.0	5.7	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	0.8	1.5	3.3	none	---	none	---	---	---	
	wet	0.8	1.5	3.3	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	1.1	1.8	4.1	none	---	none	---	---	---	
	wet	1.1	1.8	4.1	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	1.6	3.3	4.9	none	---	none	---	---	---	
	wet	1.6	3.3	4.9	6.7	6.7	6.7							
July	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	
	moist	0.0	0.0	0.3	2.5	5.7	6.2							
August	wet	2.5	5.7	6.2	6.7	6.7	6.7							
	dry	0.0	0.0	0.0	0.0	0.0	0.5	none	---	none	---	---	---	
September	moist	0.0	0.0	0.5	6.7	6.7	6.7							
	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	
October	moist	0.0	0.0	0.3	2.5	3.8	6.7							
	wet	2.5	3.8	6.7	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	2.0	3.0	5.6	none	---	none	---	---	---	
	wet	2.0	3.0	5.6	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	1.6	2.5	4.9	none	---	none	---	---	---	
	wet	1.6	2.5	4.9	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	2.0	3.3	5.4	none	---	none	---	---	---	
	wet	2.0	3.3	5.4	6.7	6.7	6.7							

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I66A (continued)

Mavie (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Roliss, depressional (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.8-1.6-3.0	none	---	occasional	long	0.0-0.5-1.0
	wet	0.8-1.6-3.0	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.6-2.5-3.3	none	---	occasional	long	0.0-0.5-1.0
	wet	1.6-2.5-3.3	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.0-0.0-1.6	none	---	occasional	long	0.0-0.5-1.0
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-0.8	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-0.8	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.0-1.6	none	---	frequent	long	0.0-0.5-1.0
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.2-0.8-2.5	none	---	occasional	brief	0.0-0.5-1.0
	wet	0.2-0.8-2.5	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	0.8-1.6-3.0	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-3.0	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	1.6-2.1-3.3	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.6-2.1-3.3	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	0.8-1.6-3.0	none	---	rare	brief	0.0-0.3-0.5
	wet	0.8-1.6-3.0	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.2-0.5-1.6	none	---	occasional	long	0.0-0.5-1.0
	wet	0.2-0.5-1.6	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.3-0.8-2.0	none	---	occasional	long	0.0-0.5-1.0
	wet	0.3-0.8-2.0	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I66A (continued)

Strathcona (3 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	1.6	3.0	4.1	none	---	none	---	---	---	---
	wet	1.6	3.0	4.1	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	2.5	3.3	4.9	none	---	none	---	---	---	---
	wet	2.5	3.3	4.9	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	1.6	2.1	4.1	none	---	none	---	---	---	---
	wet	1.6	2.1	4.1	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	0.0	0.5	2.5	none	---	occasional	brief	0.0-0.3-0.5		
	wet	0.0	0.5	2.5	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	0.5	0.8	3.3	none	---	occasional	very brief	0.0-0.3-0.5		
	wet	0.5	0.8	3.3	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	0.8	1.6	4.1	none	---	rare	very brief	0.0-0.1-0.3		
	wet	0.8	1.6	4.1	6.7	6.7	6.7							
July	moist	0.0	0.0	0.0	1.6	3.3	4.9	none	---	none	---	---	---	---
	wet	1.6	3.3	4.9	6.7	6.7	6.7							
August	moist	0.0	0.0	0.0	2.5	4.1	5.7	none	---	none	---	---	---	---
	wet	2.5	4.1	5.7	6.7	6.7	6.7							
September	moist	0.0	0.0	0.0	1.6	3.3	4.9	none	---	none	---	---	---	---
	wet	1.6	3.3	4.9	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	1.3	2.5	4.1	none	---	rare	very brief	0.0-0.1-0.3		
	wet	1.3	2.5	4.1	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	0.8	1.6	3.3	none	---	rare	very brief	0.0-0.1-0.3		
	wet	0.8	1.6	3.3	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	1.3	2.1	3.8	none	---	none	---	---	---	---
	wet	1.3	2.1	3.8	6.7	6.7	6.7							

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I67A Wheatville loam, 0 to 3 percent slopes

Wheatville (70 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	2.5	3.8	5.7	none	---	none	---	---	---	---
	wet	2.5	3.8	5.7	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	3.3	4.6	6.7	none	---	none	---	---	---	---
	wet	3.3	4.6	6.7	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	2.5	3.0	5.7	none	---	none	---	---	---	---
	wet	2.5	3.0	5.7	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	0.7	1.3	3.3	none	---	none	---	---	---	---
	wet	0.7	1.3	3.3	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	1.0	1.6	4.1	none	---	none	---	---	---	---
	wet	1.0	1.6	4.1	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	1.6	2.5	4.9	none	---	none	---	---	---	---
	wet	1.6	2.5	4.9	6.7	6.7	6.7							
July	moist	0.0	0.0	0.0	2.5	3.8	6.2	none	---	none	---	---	---	---
	wet	2.5	3.8	6.2	6.7	6.7	6.7							
August	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	---
	moist	0.0	0.0	0.3	3.8	6.7	6.7							
September	wet	3.8	6.7	6.7	6.7	6.7	6.7							
	moist	0.0	0.0	0.0	2.5	3.8	6.2	none	---	none	---	---	---	---
October	wet	2.5	3.8	6.2	6.7	6.7	6.7							
	moist	0.0	0.0	0.0	2.0	3.0	5.6	none	---	none	---	---	---	---
November	wet	2.0	3.0	5.6	6.7	6.7	6.7							
	moist	0.0	0.0	0.0	1.6	2.5	4.9	none	---	none	---	---	---	---
December	wet	1.6	2.5	4.9	6.7	6.7	6.7							
	moist	0.0	0.0	0.0	2.0	3.3	5.4	none	---	none	---	---	---	---
	wet	2.0	3.3	5.4	6.7	6.7	6.7							

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I67A (continued)

Augsburg (13 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.0-2.6-4.9	none	---	none	---	---
	wet	2.0-2.6-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.5-2.3-4.9	none	---	none	---	---
	wet	1.5-2.3-4.9	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	occasional	brief	0.0-0.3-0.5
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.0-3.9	none	---	none	---	---
	wet	1.3-2.0-3.9	6.7-6.7-6.7					

Glyndon (8 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.5-4.1-6.7	none	---	none	---	---
	wet	2.5-4.1-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	3.3-4.9-6.7	none	---	none	---	---
	wet	3.3-4.9-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	2.5-3.9-5.7	none	---	none	---	---
	wet	2.5-3.9-5.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.7-1.0-3.3	none	---	none	---	---
	wet	0.7-1.0-3.3	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	1.0-1.6-4.1	none	---	none	---	---
	wet	1.0-1.6-4.1	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	1.6-2.5-4.9	none	---	none	---	---
	wet	1.6-2.5-4.9	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.2	none	---	none	---	---
	moist	0.0-0.0-0.2	2.5-3.9-6.7					
August	wet	2.5-3.9-6.7	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.3					
September	moist	0.0-0.0-0.3	3.3-6.7-6.7	none	---	none	---	---
	wet	3.3-6.7-6.7	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	2.5-4.6-6.2	none	---	none	---	---
	wet	2.5-4.6-6.2	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.0-4.1-5.7	none	---	none	---	---
	wet	2.0-4.1-5.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	2.0-3.8-4.9	none	---	none	---	---
	wet	2.0-3.8-4.9	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I67A (continued)

Foxlake (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.8-2.1-4.1	none	---	none	---	---
	wet	0.8-2.1-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.6-2.5-4.9	none	---	none	---	---
	wet	1.6-2.5-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.3-1.3-3.3	none	---	none	---	---
	wet	0.3-1.3-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-1.6	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.3-2.1-4.1	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	occasional	very brief	0.0-0.2-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					

Hilaire (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.6-5.4-6.7	none	---	none	---	---
	wet	4.6-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	4.9-5.7-6.7	none	---	none	---	---
	wet	4.9-5.7-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.6-2.5-4.6	none	---	none	---	---
	wet	1.6-2.5-4.6	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.3-3.0-5.2	none	---	none	---	---
	wet	2.3-3.0-5.2	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.8-3.8-6.2					
July	wet	2.8-3.8-6.2	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.5					
August	moist	0.0-0.0-0.5	3.8-4.6-6.7	none	---	none	---	---
	wet	3.8-4.6-6.7	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
	moist	0.0-0.0-0.7	5.2-6.7-6.7					
October	wet	5.2-6.7-6.7	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.5					
November	moist	0.0-0.0-0.5	3.8-4.1-6.7	none	---	none	---	---
	wet	3.8-4.1-6.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.3-3.8-6.7	none	---	none	---	---
	wet	3.3-3.8-6.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.8-4.1-5.7	none	---	none	---	---
	wet	3.8-4.1-5.7	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I67A (continued)

Ulen (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.6-3.3-5.9	none	---	none	---	---
	wet	2.6-3.3-5.9	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	3.3-4.1-6.7	none	---	none	---	---
	wet	3.3-4.1-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	2.6-3.3-5.7	none	---	none	---	---
	wet	2.6-3.3-5.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.5-2.0-3.3	none	---	none	---	---
	wet	1.5-2.0-3.3	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.0-2.5-4.1	none	---	none	---	---
	wet	2.0-2.5-4.1	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.5-3.0-4.9					
	wet	2.5-3.0-4.9	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	3.0-4.9-6.2					
	wet	3.0-4.9-6.2	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
	moist	0.0-0.0-0.7	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	2.6-4.9-6.7					
	wet	2.6-4.9-6.7	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	2.3-3.0-5.7	none	---	none	---	---
	wet	2.3-3.0-5.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.0-2.5-4.9	none	---	none	---	---
	wet	2.0-2.5-4.9	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	2.3-3.0-5.2	none	---	none	---	---
	wet	2.3-3.0-5.2	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

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I68A Wheatville very fine sandy loam, 0 to 3 percent slopes

Wheatville (70 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	2.5-3.0-5.7	none	---	none	---	---
	wet	2.5-3.0-5.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.7-1.3-3.3	none	---	none	---	---
	wet	0.7-1.3-3.3	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	1.0-1.6-4.1	none	---	none	---	---
	wet	1.0-1.6-4.1	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	1.6-2.5-4.9	none	---	none	---	---
	wet	1.6-2.5-4.9	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	2.5-3.8-6.2	none	---	none	---	---
	wet	2.5-3.8-6.2	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	3.8-6.7-6.7					
September	wet	3.8-6.7-6.7	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.0	2.5-3.8-6.2					
October	wet	2.5-3.8-6.2	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.0	2.0-3.0-5.6					
November	wet	2.0-3.0-5.6	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.0	1.6-2.5-4.9					
December	wet	1.6-2.5-4.9	6.7-6.7-6.7	none	---	none	---	---
	moist	0.0-0.0-0.0	2.0-3.3-5.4					
	wet	2.0-3.3-5.4	6.7-6.7-6.7					

Augsburg (13 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.0-2.6-4.9	none	---	none	---	---
	wet	2.0-2.6-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.5-2.3-4.9	none	---	none	---	---
	wet	1.5-2.3-4.9	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	occasional	brief	0.0-0.3-0.5
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.0-3.9	none	---	none	---	---
	wet	1.3-2.0-3.9	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I68A (continued)

Glyndon (8 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.5-4.1-6.7	none	---	none	---	---
	wet	2.5-4.1-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	3.3-4.9-6.7	none	---	none	---	---
	wet	3.3-4.9-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	2.5-3.9-5.7	none	---	none	---	---
	wet	2.5-3.9-5.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.7-1.0-3.3	none	---	none	---	---
	wet	0.7-1.0-3.3	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	1.0-1.6-4.1	none	---	none	---	---
	wet	1.0-1.6-4.1	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	1.6-2.5-4.9	none	---	none	---	---
	wet	1.6-2.5-4.9	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.2	none	---	none	---	---
	moist	0.0-0.0-0.2	2.5-3.9-6.7					
August	wet	2.5-3.9-6.7	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.3					
September	moist	0.0-0.0-0.3	3.3-6.7-6.7	none	---	none	---	---
	wet	3.3-6.7-6.7	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	2.5-4.6-6.2	none	---	none	---	---
	wet	2.5-4.6-6.2	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.0-4.1-5.7	none	---	none	---	---
	wet	2.0-4.1-5.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	2.0-3.8-4.9	none	---	none	---	---
	wet	2.0-3.8-4.9	6.7-6.7-6.7					

Foxlake (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.8-2.1-4.1	none	---	none	---	---
	wet	0.8-2.1-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.6-2.5-4.9	none	---	none	---	---
	wet	1.6-2.5-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.3-1.3-3.3	none	---	none	---	---
	wet	0.3-1.3-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-1.6	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.3-2.1-4.1	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	occasional	very brief	0.0-0.2-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I68A (continued)

Hilaire (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	4.6-5.4-6.7	none	---	none	---	---
	wet	4.6-5.4-6.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	4.9-5.7-6.7	none	---	none	---	---
	wet	4.9-5.7-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.6-2.5-4.6	none	---	none	---	---
	wet	1.6-2.5-4.6	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.3-3.0-5.2	none	---	none	---	---
	wet	2.3-3.0-5.2	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.8-3.8-6.2					
July	wet	2.8-3.8-6.2	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.5					
August	moist	0.0-0.0-0.5	3.8-4.6-6.7	none	---	none	---	---
	wet	3.8-4.6-6.7	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
	moist	0.0-0.0-0.7	5.2-6.7-6.7					
October	wet	5.2-6.7-6.7	6.7-6.7-6.7	none	---	none	---	---
	dry	0.0-0.0-0.0	0.0-0.0-0.5					
November	moist	0.0-0.0-0.5	3.8-4.1-6.7	none	---	none	---	---
	wet	3.8-4.1-6.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.3-3.8-6.7	none	---	none	---	---
	wet	3.3-3.8-6.7	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	3.8-4.1-5.7	none	---	none	---	---
	wet	3.8-4.1-5.7	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I68A (continued)

Ulen (2 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.6-3.3-5.9	none	---	none	---	---
	wet	2.6-3.3-5.9	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	3.3-4.1-6.7	none	---	none	---	---
	wet	3.3-4.1-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	2.6-3.3-5.7	none	---	none	---	---
	wet	2.6-3.3-5.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	1.5-2.0-3.3	none	---	none	---	---
	wet	1.5-2.0-3.3	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	2.0-2.5-4.1	none	---	none	---	---
	wet	2.0-2.5-4.1	6.7-6.7-6.7					
June	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.5-3.0-4.9					
	wet	2.5-3.0-4.9	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	3.0-4.9-6.2					
	wet	3.0-4.9-6.2	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-0.7	none	---	none	---	---
	moist	0.0-0.0-0.7	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	2.6-4.9-6.7					
October	moist	0.0-0.0-0.0	2.3-3.0-5.7	none	---	none	---	---
	wet	2.3-3.0-5.7	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	2.0-2.5-4.9	none	---	none	---	---
	wet	2.0-2.5-4.9	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	2.3-3.0-5.2	none	---	none	---	---
	wet	2.3-3.0-5.2	6.7-6.7-6.7					

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I69A Wyandotte clay loam, 0 to 2 percent slopes

Wyandotte (65 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.0-2.6-4.9	none	---	none	---	---
	wet	2.0-2.6-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.5-2.3-4.1	none	---	none	---	---
	wet	1.5-2.3-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.0-3.9	none	---	none	---	---
	wet	1.3-2.0-3.9	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I69A (continued)

Foxlake (10 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	0.8-2.1-4.1	none	---	none	---	---
	wet	0.8-2.1-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	1.6-2.5-4.9	none	---	none	---	---
	wet	1.6-2.5-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	0.3-1.3-3.3	none	---	none	---	---
	wet	0.3-1.3-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.0-1.6	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.0-1.6	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.3-2.1-4.1	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.2-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	occasional	very brief	0.0-0.2-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.5-1.3-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-1.3-2.5	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					

Espelle (8 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.0-2.6-4.9	none	---	none	---	---
	wet	2.0-2.6-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.5-2.3-4.9	none	---	none	---	---
	wet	1.5-2.3-4.9	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.0-3.9	none	---	none	---	---
	wet	1.3-2.0-3.9	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I69A (continued)

Clearwater, depressiona (5 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	0.5	1.3	2.5	none	---	occasional	long	0.0	0.5	1.0
	wet	0.5	1.3	2.5	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	0.8	1.6	3.0	none	---	occasional	long	0.0	0.5	1.0
	wet	0.8	1.6	3.0	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	0.0	0.0	1.6	none	---	occasional	long	0.0	0.5	1.0
	wet	0.0	0.0	1.6	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	0.0	0.0	0.8	none	---	frequent	long	0.0	0.5	1.0
	wet	0.0	0.0	0.8	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	0.0	0.0	1.3	none	---	frequent	long	0.0	0.5	1.0
	wet	0.0	0.0	1.3	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	0.0	0.5	1.6	none	---	occasional	long	0.0	0.5	1.0
	wet	0.0	0.5	1.6	6.7	6.7	6.7							
July	moist	0.0	0.0	0.0	0.5	1.3	2.5	none	---	occasional	brief	0.0	0.5	1.0
	wet	0.5	1.3	2.5	6.7	6.7	6.7							
August	moist	0.0	0.0	0.0	0.8	1.6	3.0	none	---	occasional	brief	0.0	0.5	1.0
	wet	0.8	1.6	3.0	6.7	6.7	6.7							
September	moist	0.0	0.0	0.0	0.5	1.3	2.5	none	---	occasional	brief	0.0	0.5	1.0
	wet	0.5	1.3	2.5	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	0.3	0.8	2.0	none	---	occasional	brief	0.0	0.5	1.0
	wet	0.3	0.8	2.0	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	0.2	0.5	1.6	none	---	occasional	long	0.0	0.5	1.0
	wet	0.2	0.5	1.6	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	0.3	0.8	2.0	none	---	occasional	long	0.0	0.5	1.0
	wet	0.3	0.8	2.0	6.7	6.7	6.7							

Thiefriever (5 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	1.6	2.1	4.1	none	---	none	---	---	---	---
	wet	1.6	2.1	4.1	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	2.0	2.6	4.9	none	---	none	---	---	---	---
	wet	2.0	2.6	4.9	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	1.5	2.3	4.9	none	---	none	---	---	---	---
	wet	1.5	2.3	4.9	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	0.0	0.5	2.5	none	---	occasional	brief	0.0	0.3	0.5
	wet	0.0	0.5	2.5	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	0.5	0.8	3.3	none	---	occasional	brief	0.0	0.3	0.5
	wet	0.5	0.8	3.3	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	0.8	1.6	4.1	none	---	occasional	very brief	0.0	0.3	0.5
	wet	0.8	1.6	4.1	6.7	6.7	6.7							
July	moist	0.0	0.0	0.0	1.6	3.0	4.9	none	---	none	---	---	---	---
	wet	1.6	3.0	4.9	6.7	6.7	6.7							
August	moist	0.0	0.0	0.0	2.5	3.8	5.7	none	---	none	---	---	---	---
	wet	2.5	3.8	5.7	6.7	6.7	6.7							
September	moist	0.0	0.0	0.0	1.6	3.3	4.9	none	---	rare	very brief	0.0	0.1	0.3
	wet	1.6	3.3	4.9	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	1.3	2.5	4.1	none	---	rare	very brief	0.0	0.1	0.3
	wet	1.3	2.5	4.1	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	0.8	1.6	3.3	none	---	rare	very brief	0.0	0.1	0.3
	wet	0.8	1.6	3.3	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	1.3	2.0	3.9	none	---	none	---	---	---	---
	wet	1.3	2.0	3.9	6.7	6.7	6.7							

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I69A (continued)

Karlsruhe (4 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	2.6	3.3	6.2	none	---	none	---	---	---	---
	wet	2.6	3.3	6.2	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	3.3	4.1	6.7	none	---	none	---	---	---	---
	wet	3.3	4.1	6.7	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	2.6	3.3	5.9	none	---	none	---	---	---	---
	wet	2.6	3.3	5.9	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	1.5	2.0	3.3	none	---	none	---	---	---	---
	wet	1.5	2.0	3.3	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	1.8	2.5	4.1	none	---	none	---	---	---	---
	wet	1.8	2.5	4.1	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	2.5	3.0	4.9	none	---	none	---	---	---	---
	wet	2.5	3.0	4.9	6.7	6.7	6.7							
July	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	---
	moist	0.0	0.0	0.3	3.0	3.6	6.7							
	wet	3.0	3.6	6.7	6.7	6.7	6.7							
August	dry	0.0	0.0	0.0	0.0	0.0	0.5	none	---	none	---	---	---	---
	moist	0.0	0.0	0.5	4.1	6.7	6.7							
	wet	4.1	6.7	6.7	6.7	6.7	6.7							
September	dry	0.0	0.0	0.0	0.0	0.0	0.3	none	---	none	---	---	---	---
	moist	0.0	0.0	0.3	2.6	4.1	6.7							
	wet	2.6	4.1	6.7	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	3.0	4.3	5.7	none	---	none	---	---	---	---
	wet	3.0	4.3	5.7	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	2.0	2.5	4.9	none	---	none	---	---	---	---
	wet	2.0	2.5	4.9	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	2.3	3.0	5.6	none	---	none	---	---	---	---
	wet	2.3	3.0	5.6	6.7	6.7	6.7							

Syrene (3 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	2.0	3.0	4.9	none	---	none	---	---	---	---
	wet	2.0	3.0	4.9	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	2.5	3.3	5.7	none	---	none	---	---	---	---
	wet	2.5	3.3	5.7	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	1.6	2.5	4.1	none	---	none	---	---	---	---
	wet	1.6	2.5	4.1	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	0.0	0.3	2.5	none	---	occasional	very brief	0.0-0.3-0.5		
	wet	0.0	0.3	2.5	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	0.5	0.8	3.3	none	---	rare	very brief	0.0-0.3-0.5		
	wet	0.5	0.8	3.3	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	1.0	1.6	2.5	none	---	rare	very brief	0.0-0.1-0.3		
	wet	1.0	1.6	2.5	6.7	6.7	6.7							
July	moist	0.0	0.0	0.0	1.6	2.5	4.9	none	---	none	---	---	---	---
	wet	1.6	2.5	4.9	6.7	6.7	6.7							
August	moist	0.0	0.0	0.0	2.5	3.3	5.7	none	---	none	---	---	---	---
	wet	2.5	3.3	5.7	6.7	6.7	6.7							
September	moist	0.0	0.0	0.0	1.3	2.5	4.9	none	---	none	---	---	---	---
	wet	1.3	2.5	4.9	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	1.0	2.1	4.1	none	---	none	---	---	---	---
	wet	1.0	2.1	4.1	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	0.8	1.6	3.3	none	---	none	---	---	---	---
	wet	0.8	1.6	3.3	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	1.6	2.1	4.1	none	---	none	---	---	---	---
	wet	1.6	2.1	4.1	6.7	6.7	6.7							

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

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I70A Strathcona fine sandy loam, 0 to 2 percent slopes

Strathcona (70 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Kratka (10 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.1-0.3
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	rare	very brief	0.0-0.1-0.3
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I70A (continued)

Roliss (6 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.3-2.1-3.3	none	---	none	---	---
	wet	1.3-2.1-3.3	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.3-0.8-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.3-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.7-1.3-4.1	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.7-1.3-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.0-4.9	none	---	none	---	---
	wet	1.6-3.0-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	2.0-3.3-4.9	none	---	rare	very brief	0.0-0.3-0.5
	wet	2.0-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.3-1.6-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.3-3.3	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.8-1.3-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Grimstad (5 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.5-3.8-5.7	none	---	none	---	---
	wet	2.5-3.8-5.7	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	3.3-4.6-6.7	none	---	none	---	---
	wet	3.3-4.6-6.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	2.5-3.0-5.7	none	---	none	---	---
	wet	2.5-3.0-5.7	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.8-1.5-3.3	none	---	none	---	---
	wet	0.8-1.5-3.3	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	1.1-1.8-4.1	none	---	none	---	---
	wet	1.1-1.8-4.1	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
July	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.5-5.7-6.2					
	wet	2.5-5.7-6.2	6.7-6.7-6.7					
August	dry	0.0-0.0-0.0	0.0-0.0-0.5	none	---	none	---	---
	moist	0.0-0.0-0.5	6.7-6.7-6.7					
September	dry	0.0-0.0-0.0	0.0-0.0-0.3	none	---	none	---	---
	moist	0.0-0.0-0.3	2.5-3.8-6.7					
October	moist	0.0-0.0-0.0	2.0-3.0-5.6	none	---	none	---	---
	wet	2.0-3.0-5.6	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	1.6-2.5-4.9	none	---	none	---	---
	wet	1.6-2.5-4.9	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	2.0-3.3-5.4	none	---	none	---	---
	wet	2.0-3.3-5.4	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I70A (continued)

Mavie (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	1.6-3.0-4.1	none	---	none	---	---
	wet	1.6-3.0-4.1	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-4.9	none	---	none	---	---
	wet	2.5-3.3-4.9	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-0.8-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-0.8-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.1-5.7	none	---	none	---	---
	wet	2.5-4.1-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.3-2.5-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.3-2.5-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-3.8	none	---	none	---	---
	wet	1.3-2.1-3.8	6.7-6.7-6.7					

Rosewood (3 percent of the map unit)

Month	Moisture status	Top depth	Bottom depth	Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth
		L - R - H	L - R - H					L - R - H
January	moist	0.0-0.0-0.0	2.0-2.5-4.9	none	---	none	---	---
	wet	2.0-2.5-4.9	6.7-6.7-6.7					
February	moist	0.0-0.0-0.0	2.5-3.3-5.7	none	---	none	---	---
	wet	2.5-3.3-5.7	6.7-6.7-6.7					
March	moist	0.0-0.0-0.0	1.6-2.1-4.1	none	---	none	---	---
	wet	1.6-2.1-4.1	6.7-6.7-6.7					
April	moist	0.0-0.0-0.0	0.0-0.5-2.5	none	---	occasional	brief	0.0-0.3-0.5
	wet	0.0-0.5-2.5	6.7-6.7-6.7					
May	moist	0.0-0.0-0.0	0.5-1.3-3.3	none	---	occasional	very brief	0.0-0.3-0.5
	wet	0.5-1.3-3.3	6.7-6.7-6.7					
June	moist	0.0-0.0-0.0	0.8-1.6-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	0.8-1.6-4.1	6.7-6.7-6.7					
July	moist	0.0-0.0-0.0	1.6-3.3-4.9	none	---	none	---	---
	wet	1.6-3.3-4.9	6.7-6.7-6.7					
August	moist	0.0-0.0-0.0	2.5-4.9-5.7	none	---	none	---	---
	wet	2.5-4.9-5.7	6.7-6.7-6.7					
September	moist	0.0-0.0-0.0	1.3-3.0-4.9	none	---	none	---	---
	wet	1.3-3.0-4.9	6.7-6.7-6.7					
October	moist	0.0-0.0-0.0	1.0-2.1-4.1	none	---	rare	very brief	0.0-0.3-0.5
	wet	1.0-2.1-4.1	6.7-6.7-6.7					
November	moist	0.0-0.0-0.0	0.8-1.6-3.3	none	---	none	---	---
	wet	0.8-1.6-3.3	6.7-6.7-6.7					
December	moist	0.0-0.0-0.0	1.3-2.1-4.1	none	---	none	---	---
	wet	1.3-2.1-4.1	6.7-6.7-6.7					

Table 25.--Soil Moisture, Ponding, and Flooding--Continued

I70A (continued)

Strathcona, depressional (3 percent of the map unit)

Month	Moisture status	Top depth			Bottom depth			Flooding frequency	Flooding duration	Ponding frequency	Ponding duration	Ponding depth		
		L	R	H	L	R	H					L	R	H
January	moist	0.0	0.0	0.0	1.0	1.6	3.0	none	---	occasional	long	0.0	0.5	1.0
	wet	1.0	1.6	3.0	6.7	6.7	6.7							
February	moist	0.0	0.0	0.0	1.6	2.5	3.3	none	---	occasional	long	0.0	0.5	1.0
	wet	1.6	2.5	3.3	6.7	6.7	6.7							
March	moist	0.0	0.0	0.0	0.0	0.0	2.0	none	---	occasional	long	0.0	0.5	1.0
	wet	0.0	0.0	2.0	6.7	6.7	6.7							
April	moist	0.0	0.0	0.0	0.0	0.0	1.0	none	---	frequent	long	0.0	0.5	1.0
	wet	0.0	0.0	1.0	6.7	6.7	6.7							
May	moist	0.0	0.0	0.0	0.0	0.0	2.0	none	---	frequent	long	0.0	0.5	1.0
	wet	0.0	0.0	2.0	6.7	6.7	6.7							
June	moist	0.0	0.0	0.0	0.2	0.8	2.5	none	---	occasional	brief	0.0	0.5	1.0
	wet	0.2	0.8	2.5	6.7	6.7	6.7							
July	moist	0.0	0.0	0.0	0.7	1.6	3.0	none	---	rare	very brief	0.0	0.3	0.5
	wet	0.7	1.6	3.0	6.7	6.7	6.7							
August	moist	0.0	0.0	0.0	1.6	2.5	3.6	none	---	rare	very brief	0.0	0.3	0.5
	wet	1.6	2.5	3.6	6.7	6.7	6.7							
September	moist	0.0	0.0	0.0	1.0	1.6	3.0	none	---	rare	brief	0.0	0.3	0.5
	wet	1.0	1.6	3.0	6.7	6.7	6.7							
October	moist	0.0	0.0	0.0	0.7	1.3	2.6	none	---	occasional	brief	0.0	0.3	0.5
	wet	0.7	1.3	2.6	6.7	6.7	6.7							
November	moist	0.0	0.0	0.0	0.3	0.8	1.6	none	---	occasional	long	0.0	0.5	1.0
	wet	0.3	0.8	1.6	6.7	6.7	6.7							
December	moist	0.0	0.0	0.0	0.7	1.3	2.3	none	---	occasional	long	0.0	0.5	1.0
	wet	0.7	1.3	2.3	6.7	6.7	6.7							

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M-W Miscellaneous water

Miscellaneous water (100 percent of the map unit) (not applicable)

\*\*\*\*\*

W Water

Water (100 percent of the map unit) (not applicable)

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Table 26.--Soil Features

(See text for definitions of terms used in this table. Absence of an entry indicates that the feature is not a concern or that data were not estimated)

Map symbol and soil name	Pct. of map unit	Depth to re- stric- tive layer	Subsidence		Potential for frost action	Risk of corrosion	
			Initial	Total		Uncoated steel	Concrete
			In	In			
<b>B109A:</b>							
Bowstring-----	45	>80	0-12	12-45	High	High	Low
Fluvaquents-----	40	>80	---	---	High	High	Low
Hapludalfs-----	5	>80	---	---	High	Moderate	Low
Seelyeville-----	5	>80	2-12	12-50	High	High	Moderate
Water-----	5	---	---	---	---	---	---
<b>B200A:</b>							
Garnes-----	70	>80	---	---	High	Moderate	Low
Chilgren-----	13	>80	---	---	High	High	Low
Eckvoll-----	5	>80	---	---	Moderate	Moderate	Low
Garnes, very stony----	5	>80	---	---	High	Moderate	Low
Grygla-----	4	>80	---	---	High	High	Low
Pelan-----	3	>80	---	---	Moderate	Moderate	Low
<b>B201A:</b>							
Chilgren-----	75	>80	---	---	High	High	Low
Garnes-----	9	>80	---	---	High	Moderate	Low
Grygla-----	5	>80	---	---	High	High	Low
Grygla, depressiona---	5	>80	---	---	High	High	Low
Hamre-----	5	>80	2-8	2-12	High	High	Low
Pelan-----	1	>80	---	---	Moderate	Moderate	Low
<b>B202A:</b>							
Cathro-----	80	>80	2-12	12-45	High	High	Low
Hamre-----	8	>80	2-8	2-12	High	High	Low
Chilgren-----	3	>80	---	---	High	High	Low
Northwood-----	3	>80	2-8	2-12	High	High	Low
Berner-----	2	>80	2-12	12-45	High	High	Moderate
Grygla-----	2	>80	---	---	High	High	Low
Seelyeville-----	2	>80	2-12	12-50	High	High	Moderate
<b>B203A:</b>							
Northwood-----	75	>80	2-8	2-12	High	High	Low
Hamre-----	10	>80	2-8	2-12	High	High	Low

Table 26.--Soil Features--Continued

Map symbol and soil name	Pct. of map unit	Depth to re- stric- tive layer	Subsidence		Potential for frost action	Risk of corrosion	
			Initial	Total		Uncoated steel	Concrete
			In	In			
<b>B203A:</b>							
Grygla-----	7	>80	---	---	High	High	Low
Berner-----	5	>80	2-12	12-45	High	High	Moderate
Chilgren-----	3	>80	---	---	High	High	Low
<b>B204A:</b>							
Roliss-----	75	>80	---	---	High	High	Low
Grygla-----	8	>80	---	---	High	High	Low
Chilgren-----	5	>80	---	---	High	High	Low
Garnes-----	5	>80	---	---	High	Moderate	Low
Roliss, depressional---	5	>80	---	---	High	High	Low
Hamre-----	2	>80	2-8	2-12	High	High	Low
<b>B205A:</b>							
Berner-----	80	>80	2-12	12-45	High	High	Moderate
Northwood-----	7	>80	2-8	2-12	High	High	Low
Grygla-----	5	>80	---	---	High	High	Low
Cathro-----	3	>80	2-12	12-45	High	High	Low
Hamre-----	3	>80	2-8	2-12	High	High	Low
Seelyeville-----	2	>80	2-12	12-50	High	High	Moderate
<b>B206A:</b>							
Hamre-----	80	>80	2-8	2-12	High	High	Low
Chilgren-----	8	>80	---	---	High	High	Low
Northwood-----	5	>80	2-8	2-12	High	High	Low
Cathro-----	3	>80	2-12	12-45	High	High	Low
Grygla-----	2	>80	---	---	High	High	Low
Roliss-----	2	>80	---	---	High	High	Low
<b>11A:</b>							
Augsburg-----	75	>80	---	---	High	High	Low
Borup-----	10	>80	---	---	High	High	Low
Foxlake-----	5	>80	---	---	High	High	Low
Augsburg, depressional	3	>80	---	---	High	High	Low
Wheatville-----	3	>80	---	---	High	High	Low
Glyndon-----	2	>80	---	---	High	High	Low
Espelie-----	1	>80	---	---	High	High	Low
Hattie-----	1	>80	---	---	Moderate	High	Low

Table 26.--Soil Features--Continued

Map symbol and soil name	Pct. of map unit	Depth to re- stric- tive layer	Subsidence		Potential for frost action	Risk of corrosion	
			Initial	Total		Uncoated steel	Concrete
			In	In			
<b>I2A:</b>							
Augsburg-----	75	>80	---	---	High	High	Low
Borup-----	10	>80	---	---	High	High	Low
Foxlake-----	5	>80	---	---	High	High	Low
Augsburg, depressional	3	>80	---	---	High	High	Low
Wheatville-----	3	>80	---	---	High	High	Low
Glyndon-----	2	>80	---	---	High	High	Low
Espelie-----	1	>80	---	---	High	High	Low
Hattie-----	1	>80	---	---	Moderate	High	Low
<b>I3A:</b>							
Berner-----	80	>80	2-12	12-45	High	High	Moderate
Northwood-----	7	>80	2-8	2-12	High	High	Low
Kratka-----	5	>80	---	---	High	High	Low
Hamre-----	3	>80	2-8	2-12	High	High	Low
Strathcona-----	3	>80	---	---	High	High	Low
Seelyeville-----	2	>80	2-12	12-50	High	High	Moderate
<b>I4A:</b>							
Berner-----	30	>80	2-12	12-45	High	High	Moderate
Rosewood, depressional	30	>80	---	---	High	High	Low
Strathcona, depressional-----	30	>80	---	---	High	High	Low
Rosewood-----	4	>80	---	---	Moderate	High	Low
Deerwood-----	2	>80	2-8	2-12	High	High	Low
Mavie-----	2	>80	---	---	High	High	Low
Strathcona-----	2	>80	---	---	High	High	Low
<b>I5A:</b>							
Borup-----	75	>80	---	---	High	High	Low
Glyndon-----	9	>80	---	---	High	High	Low
Rosewood-----	8	>80	---	---	Moderate	High	Low
Augsburg-----	5	>80	---	---	High	High	Low
Augsburg, depressional	3	>80	---	---	High	High	Low
<b>I6A:</b>							
Borup-----	75	>80	---	---	High	High	Low
Glyndon-----	9	>80	---	---	High	High	Low

Table 26.--Soil Features--Continued

Map symbol and soil name	Pct. of map unit	Depth to re- stric- tive layer	Subsidence		Potential for frost action	Risk of corrosion	
			Initial	Total		Uncoated steel	Concrete
			In	In			
I6A:							
Rosewood-----	8	>80	---	---	Moderate	High	Low
Augsburg-----	5	>80	---	---	High	High	Low
Augsburg, depressional	3	>80	---	---	High	High	Low
I7A:							
Bowstring-----	45	>80	0-12	12-45	High	High	Low
Fluvaquents-----	45	>80	---	---	High	High	Low
Hapludolls-----	5	>80	---	---	Moderate	Moderate	Low
Water-----	5	---	---	---	---	---	---
I8A:							
Cathro-----	80	>80	2-12	12-45	High	High	Low
Hamre-----	8	>80	2-8	2-12	High	High	Low
Northwood-----	3	>80	2-8	2-12	High	High	Low
Roliss-----	3	>80	---	---	High	High	Low
Berner-----	2	>80	2-12	12-45	High	High	Moderate
Kratka-----	2	>80	---	---	High	High	Low
Seelyeville-----	2	>80	2-12	12-50	High	High	Moderate
I9A:							
Clearwater-----	80	>80	---	---	High	High	Low
Clearwater, very cobbly	5	>80	---	---	High	High	Low
Reis-----	5	>80	---	---	High	High	Low
Clearwater, depressional-----	3	>80	---	---	High	High	Low
Espelie-----	3	>80	---	---	High	High	Low
Foxlake-----	2	>80	---	---	High	High	Low
Hattie-----	1	>80	---	---	Moderate	High	Low
Huot-----	1	>80	---	---	Moderate	High	Low
I10A:							
Clearwater, depressional-----	85	>80	---	---	High	High	Low
Clearwater-----	9	>80	---	---	High	High	Low
Augsburg, depressional	3	>80	---	---	High	High	Low
Reis-----	2	>80	---	---	High	High	Low
Espelie-----	1	>80	---	---	High	High	Low

Table 26.--Soil Features--Continued

Map symbol and soil name	Pct. of map unit	Depth to re- stric- tive layer	Subsidence		Potential for frost action	Risk of corrosion	
			Initial	Total		Uncoated steel	Concrete
			In	In			
<b>I11A:</b>							
Deerwood-----	85	>80	2-8	2-12	High	High	Low
Rosewood-----	6	>80	---	---	Moderate	High	Low
Markey-----	3	>80	2-12	12-45	High	High	Low
Strathcona-----	2	>80	---	---	High	High	Low
Syrene-----	2	>80	---	---	Moderate	High	Low
Venlo-----	2	>80	---	---	Moderate	High	Low
<b>I12A:</b>							
Eckvoll-----	70	>80	---	---	Moderate	Moderate	Low
Kratka-----	8	>80	---	---	High	High	Low
Smiley-----	7	>80	---	---	High	High	Low
Linveltdt-----	5	>80	---	---	Moderate	Moderate	Low
Reiner-----	5	>80	---	---	Moderate	Moderate	Low
Foldahl-----	2	>80	---	---	Moderate	Moderate	Low
Pelan-----	2	>80	---	---	Moderate	Moderate	Low
Poppleton-----	1	>80	---	---	Low	Low	Low
<b>I13A:</b>							
Espelie-----	75	>80	---	---	High	High	Low
Foxlake-----	8	>80	---	---	High	High	Low
Hilaire-----	7	>80	---	---	Moderate	Moderate	Low
Clearwater, depressional-----	5	>80	---	---	High	High	Low
Thiefriver-----	5	>80	---	---	High	High	Low
<b>I14B:</b>							
Fairdale-----	85	>80	---	---	Moderate	Moderate	Low
Fluvaquents-----	6	>80	---	---	High	High	Low
Hapludolls-----	5	>80	---	---	Moderate	Moderate	Low
Hapludalfs-----	2	>80	---	---	High	Moderate	Low
Zell-----	2	>80	---	---	High	High	Low
<b>I14D:</b>							
Fairdale-----	85	>80	---	---	Moderate	Moderate	Low
Fluvaquents-----	6	>80	---	---	High	High	Low
Hapludolls-----	4	>80	---	---	Moderate	Moderate	Low
Zell-----	3	>80	---	---	High	High	Low

Table 26.--Soil Features--Continued

Map symbol and soil name	Pct. of map unit	Depth to re- stric- tive layer	Subsidence		Potential for frost action	Risk of corrosion	
			Initial	Total		Uncoated steel	Concrete
			In	In			
I14D: Hapludalfs-----	2	>80	---	---	High	Moderate	Low
I15A: Flaming-----	70	>80	---	---	Low	Low	Low
Garborg-----	10	>80	---	---	Moderate	High	Low
Hamar-----	5	>80	---	---	Moderate	High	Low
Ulen-----	5	>80	---	---	Moderate	Low	Low
Poppleton-----	3	>80	---	---	Low	Low	Low
Sandberg-----	3	>80	---	---	Low	Moderate	Low
Foldahl-----	2	>80	---	---	Moderate	Moderate	Low
Radium-----	2	>80	---	---	Low	Moderate	Low
I16F: Fluvaquents-----	55	>80	---	---	High	High	Low
Hapludolls-----	25	>80	---	---	Moderate	Moderate	Low
Hapludalfs-----	7	>80	---	---	High	Moderate	Low
Fairdale-----	5	>80	---	---	Moderate	Moderate	Low
Water-----	5	---	---	---	---	---	---
Bowstring-----	2	>80	0-12	12-45	High	High	Low
Rauville-----	1	>80	---	---	High	High	Low
I17A: Foldahl-----	75	>80	---	---	Moderate	Moderate	Low
Kratka-----	10	>80	---	---	High	High	Low
Roliss-----	5	>80	---	---	High	High	Low
Flaming-----	4	>80	---	---	Low	Low	Low
Grimstad-----	2	>80	---	---	High	Moderate	Low
Linveldt-----	2	>80	---	---	Moderate	Moderate	Low
Eckvoll-----	1	>80	---	---	Moderate	Moderate	Low
Strathcona-----	1	>80	---	---	High	High	Low
I18A: Foldahl-----	75	>80	---	---	Moderate	Moderate	Low
Kratka-----	10	>80	---	---	High	High	Low
Roliss-----	5	>80	---	---	High	High	Low
Flaming-----	4	>80	---	---	Low	Low	Low

Table 26.--Soil Features--Continued

Map symbol and soil name	Pct. of map unit	Depth to re- stric- tive layer	Subsidence		Potential for frost action	Risk of corrosion	
			Initial	Total		Uncoated steel	Concrete
			In	In			
<b>I18A:</b>							
Grimstad-----	2	>80	---	---	High	Moderate	Low
Linveldt-----	2	>80	---	---	Moderate	Moderate	Low
Eckvoll-----	1	>80	---	---	Moderate	Moderate	Low
Strathcona-----	1	>80	---	---	High	High	Low
<b>I19A:</b>							
Foxhome-----	65	>80	---	---	Moderate	Moderate	Low
Kittson-----	10	>80	---	---	Moderate	High	Low
Strandquist-----	10	>80	---	---	High	High	Low
Foldahl-----	5	>80	---	---	Moderate	Moderate	Low
Grimstad-----	5	>80	---	---	High	Moderate	Low
Roliss-----	3	>80	---	---	High	High	Low
Mavie-----	2	>80	---	---	High	High	Low
<b>I20A:</b>							
Foxlake-----	75	>80	---	---	High	High	Low
Clearwater-----	5	>80	---	---	High	High	Low
Foxlake, very cobbly---	5	>80	---	---	High	High	Low
Augsburg-----	3	>80	---	---	High	High	Low
Clearwater, depressional-----	3	>80	---	---	High	High	Low
Espelie-----	3	>80	---	---	High	High	Low
Hilaire-----	2	>80	---	---	Moderate	Moderate	Low
Reis-----	2	>80	---	---	High	High	Low
Wheatville-----	2	>80	---	---	High	High	Low
<b>I21A:</b>							
Fram-----	85	>80	---	---	High	High	Low
Hedman-----	12	>80	---	---	High	High	Low
Strathcona-----	2	>80	---	---	High	High	Low
Foxhome-----	1	>80	---	---	Moderate	Moderate	Low
<b>I22A:</b>							
Glyndon-----	75	>80	---	---	High	High	Low
Borup-----	10	>80	---	---	High	High	Low
Augsburg-----	5	>80	---	---	High	High	Low
Ulen-----	5	>80	---	---	Moderate	Low	Low

Table 26.--Soil Features--Continued

Map symbol and soil name	Pct. of map unit	Depth to re- stric- tive layer	Subsidence		Potential for frost action	Risk of corrosion	
			Initial	Total		Uncoated steel	Concrete
			In	In			
<b>I22A:</b>							
Wheatville-----	3	>80	---	---	High	High	Low
Flaming-----	2	>80	---	---	Low	Low	Low
<b>I23A:</b>							
Glyndon-----	75	>80	---	---	High	High	Low
Borup-----	10	>80	---	---	High	High	Low
Augsburg-----	5	>80	---	---	High	High	Low
Ulen-----	5	>80	---	---	Moderate	Low	Low
Wheatville-----	3	>80	---	---	High	High	Low
Flaming-----	2	>80	---	---	Low	Low	Low
<b>I24A:</b>							
Grimstad-----	70	>80	---	---	High	Moderate	Low
Strathcona-----	12	>80	---	---	High	High	Low
Foldahl-----	5	>80	---	---	Moderate	Moderate	Low
Hamerly-----	5	>80	---	---	High	High	Low
Foxhome-----	2	>80	---	---	Moderate	Moderate	Low
Karlsruhe-----	2	>80	---	---	Moderate	High	Low
Mavie-----	2	>80	---	---	High	High	Low
Ulen-----	2	>80	---	---	Moderate	Low	Low
<b>I25A:</b>							
Hamar-----	75	>80	---	---	Moderate	High	Low
Garborg-----	10	>80	---	---	Moderate	High	Low
Rosewood-----	7	>80	---	---	Moderate	High	Low
Venlo-----	3	>80	---	---	Moderate	High	Low
Flaming-----	2	>80	---	---	Low	Low	Low
Hangaard-----	2	>80	---	---	Moderate	High	Low
Kratka-----	1	>80	---	---	High	High	Low
<b>I26A:</b>							
Hamerly-----	75	>80	---	---	High	High	Low
Vallers-----	12	>80	---	---	High	High	Low
Foxhome-----	3	>80	---	---	Moderate	Moderate	Low
Grimstad-----	3	>80	---	---	High	Moderate	Low
Hamerly, very cobbly---	3	>80	---	---	High	High	Low

Table 26.--Soil Features--Continued

Map symbol and soil name	Pct. of map unit	Depth to re- stric- tive layer	Subsidence		Potential for frost action	Risk of corrosion	
			Initial	Total		Uncoated steel	Concrete
			In	In			
I26A:							
Strathcona-----	3	>80	---	---	High	High	Low
Roliss, depressional---	1	>80	---	---	High	High	Low
I27A:							
Hamre-----	80	>80	2-8	2-12	High	High	Low
Northwood-----	5	>80	2-8	2-12	High	High	Low
Roliss-----	5	>80	---	---	High	High	Low
Smiley-----	5	>80	---	---	High	High	Low
Cathro-----	3	>80	2-12	12-45	High	High	Low
Kratka-----	2	>80	---	---	High	High	Low
I28A:							
Hangaard-----	75	>80	---	---	Moderate	High	Low
Hamar-----	7	>80	---	---	Moderate	High	Low
Syrene-----	7	>80	---	---	Moderate	High	Low
Karlsruhe-----	3	>80	---	---	Moderate	High	Low
Rosewood-----	3	>80	---	---	Moderate	High	Low
Strandquist-----	3	>80	---	---	High	High	Low
Deerwood-----	2	>80	2-8	2-12	High	High	Low
I29A:							
Hattie-----	75	>80	---	---	Moderate	High	Low
Clearwater-----	12	>80	---	---	High	High	Low
Reis-----	6	>80	---	---	High	High	Low
Hattie, very cobbly---	5	>80	---	---	Moderate	High	Low
Hilaire-----	2	>80	---	---	Moderate	Moderate	Low
I29D:							
Hattie-----	85	>80	---	---	Moderate	High	Low
Clearwater-----	6	>80	---	---	High	High	Low
Hattie, level-----	5	>80	---	---	Moderate	High	Low
Boyerlake-----	4	>80	---	---	Moderate	High	Low
I30A:							
Hedman-----	85	>80	---	---	High	High	Low
Fram-----	5	>80	---	---	High	High	Low
Strathcona-----	5	>80	---	---	High	High	Low

Table 26.--Soil Features--Continued

Map symbol and soil name	Pct. of map unit	Depth to re- stric- tive layer	Subsidence		Potential for frost action	Risk of corrosion	
			Initial	Total		Uncoated steel	Concrete
			In	In			
I30A:							
Haug-----	3	>80	2-8	2-12	High	High	Low
Strandquist-----	2	>80	---	---	High	High	Low
I31A:							
Hedman-----	50	>80	---	---	High	High	Low
Fram-----	40	>80	---	---	High	High	Low
Strathcona-----	5	>80	---	---	High	High	Low
Haug-----	3	>80	2-8	2-12	High	High	Low
Strandquist-----	2	>80	---	---	High	High	Low
I32A:							
Hilaire-----	75	>80	---	---	Moderate	Moderate	Low
Espelie-----	12	>80	---	---	High	High	Low
Huot-----	5	>80	---	---	Moderate	High	Low
Flaming-----	2	>80	---	---	Low	Low	Low
Foxlake-----	2	>80	---	---	High	High	Low
Wheatville-----	2	>80	---	---	High	High	Low
Thiefriver-----	1	>80	---	---	High	High	Low
Wyandotte-----	1	>80	---	---	High	High	Low
I33A:							
Hilaire-----	75	>80	---	---	Moderate	Moderate	Low
Espelie-----	12	>80	---	---	High	High	Low
Huot-----	5	>80	---	---	Moderate	High	Low
Flaming-----	2	>80	---	---	Low	Low	Low
Foxlake-----	2	>80	---	---	High	High	Low
Wheatville-----	2	>80	---	---	High	High	Low
Thiefriver-----	1	>80	---	---	High	High	Low
Wyandotte-----	1	>80	---	---	High	High	Low
I34A:							
Huot-----	75	>80	---	---	Moderate	High	Low
Thiefriver-----	12	>80	---	---	High	High	Low
Hilaire-----	5	>80	---	---	Moderate	Moderate	Low
Flaming-----	3	>80	---	---	Low	Low	Low
Foxlake-----	3	>80	---	---	High	High	Low
Ulen-----	2	>80	---	---	Moderate	Low	Low

Table 26.--Soil Features--Continued

Map symbol and soil name	Pct. of map unit	Depth to re- stric- tive layer	Subsidence		Potential for frost action	Risk of corrosion	
			Initial	Total		Uncoated steel	Concrete
			In	In			
<b>I35A:</b>							
Karlsruhe-----	70	>80	---	---	Moderate	High	Low
Syrene-----	10	>80	---	---	Moderate	High	Low
Ulen-----	10	>80	---	---	Moderate	Low	Low
Radium-----	5	>80	---	---	Low	Moderate	Low
Rosewood-----	3	>80	---	---	Moderate	High	Low
Sandberg-----	2	>80	---	---	Low	Moderate	Low
<b>I36A:</b>							
Kittson-----	70	>80	---	---	Moderate	High	Low
Roliss-----	12	>80	---	---	High	High	Low
Hamerly-----	5	>80	---	---	High	High	Low
Kratka-----	5	>80	---	---	High	High	Low
Grimstad-----	3	>80	---	---	High	Moderate	Low
Strandquist-----	3	>80	---	---	High	High	Low
Foxhome-----	2	>80	---	---	Moderate	Moderate	Low
<b>I37A:</b>							
Kratka, depressional---	45	>80	---	---	High	High	Low
Strathcona, depressional-----	45	>80	---	---	High	High	Low
Northwood-----	5	>80	2-8	2-12	High	High	Low
Kratka-----	2	>80	---	---	High	High	Low
Strathcona-----	2	>80	---	---	High	High	Low
Roliss-----	1	>80	---	---	High	High	Low
<b>I38A:</b>							
Kratka-----	70	>80	---	---	High	High	Low
Smiley-----	7	>80	---	---	High	High	Low
Foldahl-----	5	>80	---	---	Moderate	Moderate	Low
Kratka, very cobbly----	5	>80	---	---	High	High	Low
Strathcona-----	5	>80	---	---	High	High	Low
Kratka, depressional---	3	>80	---	---	High	High	Low
Strandquist-----	3	>80	---	---	High	High	Low
Linveltdt-----	2	>80	---	---	Moderate	Moderate	Low
<b>I39A:</b>							
Linveltdt-----	65	>80	---	---	Moderate	Moderate	Low

Table 26.--Soil Features--Continued

Map symbol and soil name	Pct. of map unit	Depth to re- stric- tive layer	Subsidence		Potential for frost action	Risk of corrosion	
			Initial	Total		Uncoated steel	Concrete
			In	In			
<b>I39A:</b>							
Kratka-----	14	>80	---	---	High	High	Low
Reiner-----	10	>80	---	---	Moderate	Moderate	Low
Smiley-----	5	>80	---	---	High	High	Low
Eckvoll-----	3	>80	---	---	Moderate	Moderate	Low
Foldahl-----	2	>80	---	---	Moderate	Moderate	Low
Pelan-----	1	>80	---	---	Moderate	Moderate	Low
<b>I40B:</b>							
Maddock-----	85	>80	---	---	Low	Low	Low
Flaming-----	5	>80	---	---	Low	Low	Low
Sandberg-----	5	>80	---	---	Low	Moderate	Low
Halverson-----	3	>80	---	---	Low	High	Low
Hamar-----	2	>80	---	---	Moderate	High	Low
<b>I40F:</b>							
Maddock-----	90	>80	---	---	Low	Low	Low
Flaming-----	5	>80	---	---	Low	Low	Low
Sandberg-----	5	>80	---	---	Low	Moderate	Low
<b>I41A:</b>							
Markey-----	80	>80	2-12	12-45	High	High	Low
Deerwood-----	12	>80	2-8	2-12	High	High	Low
Berner-----	2	>80	2-12	12-45	High	High	Moderate
Hamar-----	2	>80	---	---	Moderate	High	Low
Seelyeville-----	2	>80	2-12	12-50	High	High	Moderate
Syrene-----	2	>80	---	---	Moderate	High	Low
<b>I42A:</b>							
Markey, ponded-----	85	>80	2-12	12-45	High	High	Low
Markey-----	5	>80	2-12	12-45	High	High	Low
Deerwood-----	4	>80	2-8	2-12	High	High	Low
Seelyeville, ponded----	4	>80	2-12	12-50	High	High	Moderate
Hamar-----	1	>80	---	---	Moderate	High	Low
Hangaard-----	1	>80	---	---	Moderate	High	Low
<b>I43A:</b>							
Mavie-----	70	>80	---	---	High	High	Low
Vallars-----	10	>80	---	---	High	High	Low

Table 26.--Soil Features--Continued

Map symbol and soil name	Pct. of map unit	Depth to re- stric- tive layer	Subsidence		Potential for frost action	Risk of corrosion	
			Initial	Total		Uncoated steel	Concrete
			In	In			
I43A:							
Strandquist-----	7	>80	---	---	High	High	Low
Strathcona-----	5	>80	---	---	High	High	Low
Strathcona, depressional-----	3	>80	---	---	High	High	Low
Foxhome-----	2	>80	---	---	Moderate	Moderate	Low
Karlsruhe-----	2	>80	---	---	Moderate	High	Low
Grimstad-----	1	>80	---	---	High	Moderate	Low
I44A:							
Newfolden-----	75	>80	---	---	Moderate	Moderate	Low
Smiley-----	12	>80	---	---	High	High	Low
Boash-----	8	>80	---	---	High	High	Low
Linveldt-----	4	>80	---	---	Moderate	Moderate	Low
Hapludolls-----	1	>80	---	---	Moderate	Moderate	Low
I45A:							
Northwood-----	75	>80	2-8	2-12	High	High	Low
Hamre-----	10	>80	2-8	2-12	High	High	Low
Berner-----	5	>80	2-12	12-45	High	High	Moderate
Kratka-----	5	>80	---	---	High	High	Low
Strandquist-----	3	>80	---	---	High	High	Low
Roliss-----	2	>80	---	---	High	High	Low
I46A:							
Pits-----	85	---	---	---	---	---	---
Udipsamments-----	10	>80	---	---	Low	Low	Low
Radium-----	2	>80	---	---	Low	Moderate	Low
Maddock-----	1	>80	---	---	Low	Low	Low
Marquette-----	1	>80	---	---	Low	Low	Low
Sandberg-----	1	>80	---	---	Low	Moderate	Low
I47A:							
Poppleton-----	75	>80	---	---	Low	Low	Low
Flaming-----	12	>80	---	---	Low	Low	Low
Garborg-----	5	>80	---	---	Moderate	High	Low
Hamar-----	3	>80	---	---	Moderate	High	Low

Table 26.--Soil Features--Continued

Map symbol and soil name	Pct. of map unit	Depth to re- stric- tive layer	Subsidence		Potential for frost action	Risk of corrosion	
			Initial	Total		Uncoated steel	Concrete
			In	In			
<b>I47A:</b>							
Radium-----	2	>80	---	---	Low	Moderate	Low
Ulen-----	2	>80	---	---	Moderate	Low	Low
Maddock-----	1	>80	---	---	Low	Low	Low
<b>I48A:</b>							
Radium-----	75	>80	---	---	Low	Moderate	Low
Sandberg-----	7	>80	---	---	Low	Moderate	Low
Oylen-----	5	>80	---	---	Moderate	Moderate	Low
Flaming-----	4	>80	---	---	Low	Low	Low
Garborg-----	3	>80	---	---	Moderate	High	Low
Hangaard-----	3	>80	---	---	Moderate	High	Low
Hamar-----	2	>80	---	---	Moderate	High	Low
Poppleton-----	1	>80	---	---	Low	Low	Low
<b>I49A:</b>							
Rauville-----	80	>80	---	---	High	High	Low
Fluvaquents-----	12	>80	---	---	High	High	Low
Water-----	5	---	---	---	---	---	---
Lamoure-----	3	>80	---	---	High	High	Low
<b>I50A:</b>							
Reiner-----	70	>80	---	---	Moderate	Moderate	Low
Smiley-----	12	>80	---	---	High	High	Low
Reiner, very cobbly----	7	>80	---	---	Moderate	Moderate	Low
Linveltdt-----	5	>80	---	---	Moderate	Moderate	Low
Eckvoll-----	3	>80	---	---	Moderate	Moderate	Low
Kratka-----	3	>80	---	---	High	High	Low
<b>I51A:</b>							
Reiner-----	65	>80	---	---	Moderate	Moderate	Low
Smiley-----	9	>80	---	---	High	High	Low
Reiner fine sandy loam	8	>80	---	---	Moderate	Moderate	Low
Linveltdt-----	7	>80	---	---	Moderate	Moderate	Low
Kratka-----	5	>80	---	---	High	High	Low
Eckvoll-----	3	>80	---	---	Moderate	Moderate	Low
Reiner, very cobbly----	3	>80	---	---	Moderate	Moderate	Low

Table 26.--Soil Features--Continued

Map symbol and soil name	Pct. of map unit	Depth to re- stric- tive layer	Subsidence		Potential for frost action	Risk of corrosion	
			Initial	Total		Uncoated steel	Concrete
			In	In			
I52A:							
Reis-----	55	>80	---	---	High	High	Low
Clearwater-----	30	>80	---	---	High	High	Low
Clearwater, very cobbly	5	>80	---	---	High	High	Low
Clearwater, depressional-----	3	>80	---	---	High	High	Low
Espelie-----	3	>80	---	---	High	High	Low
Hattie-----	3	>80	---	---	Moderate	High	Low
Wyandotte-----	1	>80	---	---	High	High	Low
I53A:							
Roliss-----	75	>80	---	---	High	High	Low
Kratka-----	8	>80	---	---	High	High	Low
Roliss, very cobbly----	7	>80	---	---	High	High	Low
Kittson-----	5	>80	---	---	Moderate	High	Low
Roliss, depressional---	3	>80	---	---	High	High	Low
Smiley-----	2	>80	---	---	High	High	Low
I54A:							
Roliss, depressional---	80	>80	---	---	High	High	Low
Roliss-----	12	>80	---	---	High	High	Low
Hamre-----	5	>80	2-8	2-12	High	High	Low
Kratka-----	3	>80	---	---	High	High	Low
I55A:							
Rosewood-----	75	>80	---	---	Moderate	High	Low
Ulen-----	10	>80	---	---	Moderate	Low	Low
Hamar-----	6	>80	---	---	Moderate	High	Low
Rosewood, depressional	3	>80	---	---	High	High	Low
Syrene-----	3	>80	---	---	Moderate	High	Low
Karlsruhe-----	1	>80	---	---	Moderate	High	Low
Strathcona-----	1	>80	---	---	High	High	Low
Thiefriver-----	1	>80	---	---	High	High	Low
I56A:							
Rosewood-----	50	>80	---	---	Moderate	High	Low
Venlo-----	40	>80	---	---	Moderate	High	Low

Table 26.--Soil Features--Continued

Map symbol and soil name	Pct. of map unit	Depth to re- stric- tive layer	Subsidence		Potential for frost action	Risk of corrosion	
			Initial	Total		Uncoated steel	Concrete
			In	In			
<b>I56A:</b>							
Deerwood-----	3	>80	2-8	2-12	High	High	Low
Syrene-----	3	>80	---	---	Moderate	High	Low
Ulen-----	2	>80	---	---	Moderate	Low	Low
Strathcona-----	1	>80	---	---	High	High	Low
Thiefriever-----	1	>80	---	---	High	High	Low
<b>I57B:</b>							
Sandberg-----	50	>80	---	---	Low	Moderate	Low
Radium-----	25	>80	---	---	Low	Moderate	Low
Sioux-----	8	>80	---	---	Low	Low	Low
Oylen-----	7	>80	---	---	Moderate	Moderate	Low
Flaming-----	5	>80	---	---	Low	Low	Low
Garborg-----	5	>80	---	---	Moderate	High	Low
<b>I58A:</b>							
Seelyeville-----	90	>80	2-12	12-50	High	High	Moderate
Cathro-----	3	>80	2-12	12-45	High	High	Low
Dora-----	3	>80	2-12	12-45	High	High	Moderate
Markey-----	3	>80	2-12	12-45	High	High	Low
Berner-----	1	>80	2-12	12-45	High	High	Moderate
<b>I59A:</b>							
Smiley-----	65	>80	---	---	High	High	Low
Smiley, very cobbly---	10	>80	---	---	High	High	Low
Kratka-----	9	>80	---	---	High	High	Low
Roliss-----	5	>80	---	---	High	High	Low
Reiner-----	4	>80	---	---	Moderate	Moderate	Low
Linveltdt-----	3	>80	---	---	Moderate	Moderate	Low
Smiley, depressional---	3	>80	---	---	High	High	Low
Strandquist-----	1	>80	---	---	High	High	Low
<b>I60A:</b>							
Smiley, depressional---	80	>80	---	---	High	High	Low
Smiley-----	10	>80	---	---	High	High	Low
Hamre-----	5	>80	2-8	2-12	High	High	Low
Kratka-----	5	>80	---	---	High	High	Low

Table 26.--Soil Features--Continued

Map symbol and soil name	Pct. of map unit	Depth to re- stric- tive layer	Subsidence		Potential for frost action	Risk of corrosion	
			Initial	Total		Uncoated steel	Concrete
			In	In			
<b>I61A:</b>							
Strandquist-----	70	>80	---	---	High	High	Low
Mavie-----	8	>80	---	---	High	High	Low
Roliss-----	7	>80	---	---	High	High	Low
Kratka-----	5	>80	---	---	High	High	Low
Foxhome-----	4	>80	---	---	Moderate	Moderate	Low
Hangaard-----	3	>80	---	---	Moderate	High	Low
Northwood-----	3	>80	2-8	2-12	High	High	Low
<b>I62A:</b>							
Syrene-----	70	>80	---	---	Moderate	High	Low
Rosewood-----	11	>80	---	---	Moderate	High	Low
Hangaard-----	5	>80	---	---	Moderate	High	Low
Karlsruhe-----	4	>80	---	---	Moderate	High	Low
Deerwood-----	3	>80	2-8	2-12	High	High	Low
Hamar-----	3	>80	---	---	Moderate	High	Low
Strandquist-----	2	>80	---	---	High	High	Low
Radium-----	1	>80	---	---	Low	Moderate	Low
Wyandotte-----	1	>80	---	---	High	High	Low
<b>I63A:</b>							
Thiefriver-----	70	>80	---	---	High	High	Low
Espelie-----	10	>80	---	---	High	High	Low
Foxlake-----	7	>80	---	---	High	High	Low
Huot-----	5	>80	---	---	Moderate	High	Low
Clearwater, depressional-----	3	>80	---	---	High	High	Low
Rosewood-----	3	>80	---	---	Moderate	High	Low
Ulen-----	1	>80	---	---	Moderate	Low	Low
Wyandotte-----	1	>80	---	---	High	High	Low
<b>I64A:</b>							
Ulen-----	70	>80	---	---	Moderate	Low	Low
Rosewood-----	10	>80	---	---	Moderate	High	Low
Flaming-----	8	>80	---	---	Low	Low	Low
Karlsruhe-----	5	>80	---	---	Moderate	High	Low

Table 26.--Soil Features--Continued

Map symbol and soil name	Pct. of map unit	Depth to re- stric- tive layer	Subsidence		Potential for frost action	Risk of corrosion	
			Initial	Total		Uncoated steel	Concrete
			In	In			
<b>I64A:</b>							
Radium-----	3	>80	---	---	Low	Moderate	Low
Strathcona-----	2	>80	---	---	High	High	Low
Thiefriever-----	2	>80	---	---	High	High	Low
<b>I65A:</b>							
Ulen-----	70	>80	---	---	Moderate	Low	Low
Rosewood-----	10	>80	---	---	Moderate	High	Low
Flaming-----	6	>80	---	---	Low	Low	Low
Poppleton-----	4	>80	---	---	Low	Low	Low
Karlsruhe-----	3	>80	---	---	Moderate	High	Low
Radium-----	3	>80	---	---	Low	Moderate	Low
Strathcona-----	2	>80	---	---	High	High	Low
Thiefriever-----	2	>80	---	---	High	High	Low
<b>I66A:</b>							
Vallers-----	75	>80	---	---	High	High	Low
Vallers, very cobbly---	7	>80	---	---	High	High	Low
Hamerly-----	6	>80	---	---	High	High	Low
Grimstad-----	3	>80	---	---	High	Moderate	Low
Mavie-----	3	>80	---	---	High	High	Low
Roliss, depressional---	3	>80	---	---	High	High	Low
Strathcona-----	3	>80	---	---	High	High	Low
<b>I67A:</b>							
Wheatville-----	70	>80	---	---	High	High	Low
Augsburg-----	13	>80	---	---	High	High	Low
Glyndon-----	8	>80	---	---	High	High	Low
Foxlake-----	5	>80	---	---	High	High	Low
Hilaire-----	2	>80	---	---	Moderate	Moderate	Low
Ulen-----	2	>80	---	---	Moderate	Low	Low
<b>I68A:</b>							
Wheatville-----	70	>80	---	---	High	High	Low
Augsburg-----	13	>80	---	---	High	High	Low
Glyndon-----	8	>80	---	---	High	High	Low
Foxlake-----	5	>80	---	---	High	High	Low

Table 26.--Soil Features--Continued

Map symbol and soil name	Pct. of map unit	Depth to re- stric- tive layer	Subsidence		Potential for frost action	Risk of corrosion	
			Initial	Total		Uncoated steel	Concrete
			In	In			
I68A:							
Hilaire-----	2	>80	---	---	Moderate	Moderate	Low
Ulen-----	2	>80	---	---	Moderate	Low	Low
I69A:							
Wyandotte-----	65	>80	---	---	High	High	Low
Foxlake-----	10	>80	---	---	High	High	Low
Espelie-----	8	>80	---	---	High	High	Low
Clearwater, depressional-----	5	>80	---	---	High	High	Low
Thiefriever-----	5	>80	---	---	High	High	Low
Karlsruhe-----	4	>80	---	---	Moderate	High	Low
Syrene-----	3	>80	---	---	Moderate	High	Low
I70A:							
Strathcona-----	70	>80	---	---	High	High	Low
Kratka-----	10	>80	---	---	High	High	Low
Roliss-----	6	>80	---	---	High	High	Low
Grimstad-----	5	>80	---	---	High	Moderate	Low
Mavie-----	3	>80	---	---	High	High	Low
Rosewood-----	3	>80	---	---	Moderate	High	Low
Strathcona, depressional-----	3	>80	---	---	High	High	Low
M-W. Miscellaneous water							
W. Water							

## References

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American Association of State Highway and Transportation Officials (AASHTO). 2000. Standard specifications for transportation materials and methods of sampling and testing. 20th edition, 2 volumes.

American Society for Testing and Materials (ASTM). 2001. Standard classification of soils for engineering purposes. ASTM Standard D-2487.

Harris, Kenneth L. 1987. The Quaternary geology of the Red Lake Falls area. Minnesota and North Dakota Geological Survey.

Harris, Kenneth L., R. Moran, and Lee Clayton. 1974. Late Quaternary stratigraphic nomenclature, Red River Valley, North Dakota and Minnesota. North Dakota Geological Survey, Miscellaneous Series 52.

Hunst, Michael A., and George Howse. 1999. Minnesota agriculture statistics.

International Coalition for Land and Water Stewardship in the Red River Basin. 1990. Red Lake County comprehensive local water plan.

Nikiforoff, C.C. 1939. Soil survey (reconnaissance) of the Red River Valley Area. Minnesota Bureau of Chemistry and Soils, Soil Survey Division, Series 1933, number 25.

Red Lake County Historical Society. 1976. A history of Red Lake County.

Sims, P.K., and G.B. Morey. 1972. Geology of Minnesota: A centennial volume. Minnesota Geological Survey.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18.

Soil Survey Staff. 1998. Keys to soil taxonomy. 8th edition. U.S. Department of Agriculture, Natural Resources Conservation Service.

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service. U.S. Department of Agriculture Handbook 436.

United States Department of Agriculture. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210.

United States Department of Agriculture. 1999. Soil biology primer. PA-1637.

United States Department of Agriculture. 1981. Land resource regions and major land resource areas of the United States. Soil Conservation Service. U.S. Department of Agriculture Handbook 296.

United States Department of Agriculture. 2003. National soil survey handbook, title 430–VI. [Online] <http://soils.usda.gov/technical/handbook/>.

Wright, H.E., Jr. 1972. Quaternary history of Minnesota. *In* Geology of Minnesota: A centennial volume. Minnesota Geological Survey.

# Glossary

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- Ablation till.** Loose, permeable till deposited during the final downwasting of glacial ice. Lenses of crudely sorted sand and gravel are common.
- Aeration, soil.** The exchange of air in soil with air from the atmosphere. The air in a well aerated soil is similar to that in the atmosphere; the air in a poorly aerated soil is considerably higher in carbon dioxide and lower in oxygen.
- Aggregate, soil.** Many fine particles held in a single mass or cluster. Natural soil aggregates, such as granules, blocks, or prisms, are called peds. Clods are aggregates produced by tillage or logging.
- Alluvium.** Material, such as sand, silt, or clay, deposited on land by streams.
- Alpha,alpha-dipyridyl.** A dye that when dissolved in 1N ammonium acetate is used to detect the presence of reduced iron (Fe II) in the soil. A positive reaction indicates a type of redoximorphic feature.
- Animal unit month (AUM).** The amount of forage required by one mature cow of approximately 1,000 pounds weight, with or without a calf, for 1 month.
- Aquic conditions.** Current soil wetness characterized by saturation, reduction, and redoximorphic features.
- Argillic horizon.** A subsoil horizon characterized by an accumulation of illuvial clay.
- Aspect.** The direction in which a slope faces.
- Available water capacity (available moisture capacity).** The capacity of soils to hold water available for use by most plants. It is commonly defined as the difference between the amount of soil water at field moisture capacity and the amount at wilting point. It is commonly expressed as inches of water per inch of soil. The capacity, in inches, in a 60-inch profile or to a limiting layer is expressed as:
- |                 |              |
|-----------------|--------------|
| Very low .....  | 0 to 3       |
| Low .....       | 3 to 6       |
| Moderate .....  | 6 to 9       |
| High .....      | 9 to 12      |
| Very high ..... | more than 12 |
- Backslope.** The position that forms the steepest and generally linear, middle portion of a hillslope. In profile, backslopes are commonly bounded by a convex shoulder above and a concave footslope below.
- Basal till.** Compact glacial till deposited beneath the ice.
- Base saturation.** The degree to which material having cation-exchange properties is saturated with exchangeable bases (sum of Ca, Mg, Na, and K), expressed as a percentage of the total cation-exchange capacity.
- Base slope.** A geomorphic component of hills consisting of the concave to linear (perpendicular to the contour) slope that, regardless of the lateral shape, forms an apron or wedge at the bottom of a hillside dominated by colluvium and slope-wash sediments (for example, slope alluvium).
- Beach deposits.** Material, such as sand and gravel, that is generally laid down parallel to an active or relict shoreline of a postglacial or glacial lake.
- Bedding planes.** Fine strata, less than 5 millimeters thick, in unconsolidated alluvial, eolian, lacustrine, or marine sediment.

- Bedrock.** The solid rock that underlies the soil and other unconsolidated material or that is exposed at the surface.
- Bedrock-controlled topography.** A landscape where the configuration and relief of the landforms are determined or strongly influenced by the underlying bedrock.
- Bench terrace.** A raised, level or nearly level strip of earth constructed on or nearly on a contour, supported by a barrier of rocks or similar material, and designed to make the soil suitable for tillage and to prevent accelerated erosion.
- Bisequum.** Two sequences of soil horizons, each of which consists of an illuvial horizon and the overlying eluvial horizons.
- Blowout.** A shallow depression from which all or most of the soil material has been removed by the wind. A blowout has a flat or irregular floor formed by a resistant layer or by an accumulation of pebbles or cobbles. In some blowouts the water table is exposed.
- Bog.** Waterlogged, spongy ground, consisting primarily of mosses, containing acidic, decaying vegetation (such as sphagnum, sedges, and heaths) that develops into peat.
- Boulders.** Rock fragments larger than 2 feet (60 centimeters) in diameter.
- Brush management.** Use of mechanical, chemical, or biological methods to make conditions favorable for reseeding or to reduce or eliminate competition from woody vegetation and thus allow understory grasses and forbs to recover. Brush management increases forage production and thus reduces the hazard of erosion. It can improve the habitat for some species of wildlife.
- Calcareous soil.** A soil containing enough calcium carbonate (commonly combined with magnesium carbonate) to effervesce visibly when treated with cold, dilute hydrochloric acid.
- Canopy.** The leafy crown of trees or shrubs. (See Crown.)
- Capillary water.** Water held as a film around soil particles and in tiny spaces between particles. Surface tension is the adhesive force that holds capillary water in the soil.
- Catena.** A sequence, or "chain," of soils on a landscape that formed in similar kinds of parent material but have different characteristics as a result of differences in relief and drainage.
- Cation.** An ion carrying a positive charge of electricity. The common soil cations are calcium, potassium, magnesium, sodium, and hydrogen.
- Cation-exchange capacity.** The total amount of exchangeable cations that can be held by the soil, expressed in terms of milliequivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. The term, as applied to soils, is synonymous with base-exchange capacity but is more precise in meaning.
- Catsteps.** Very small, irregular terraces on steep hillsides, especially in pasture, formed by the trampling of cattle or the slippage of saturated soil.
- Channery soil material.** Soil material that has, by volume, 15 to 35 percent thin, flat fragments of sandstone, shale, slate, limestone, or schist as much as 6 inches (15 centimeters) along the longest axis. A single piece is called a channer.
- Chemical treatment.** Control of unwanted vegetation through the use of chemicals.
- Chiseling.** Tillage with an implement having one or more soil-penetrating points that shatter or loosen hard, compacted layers to a depth below normal plow depth.
- Clay.** As a soil separate, the mineral soil particles less than 0.002 millimeter in diameter. As a soil textural class, soil material that is 40 percent or more clay, less than 45 percent sand, and less than 40 percent silt.
- Clay depletions.** Low-chroma zones having a low content of iron, manganese, and clay because of the chemical reduction of iron and manganese and the removal of iron, manganese, and clay. A type of redoximorphic depletion.
- Clay film.** A thin coating of oriented clay on the surface of a soil aggregate or lining pores or root channels. Synonyms: clay coating, clay skin.

- Climax plant community.** The stabilized plant community on a particular site. The plant cover reproduces itself and does not change so long as the environment remains the same.
- Coarse textured soil.** Sand or loamy sand.
- Cobble (or cobblestone).** A rounded or partly rounded fragment of rock 3 to 10 inches (7.6 to 25 centimeters) in diameter.
- Cobbly soil material.** Material that has 15 to 35 percent, by volume, rounded or partially rounded rock fragments 3 to 10 inches (7.6 to 25 centimeters) in diameter. Very cobbly soil material has 35 to 60 percent of these rock fragments, and extremely cobbly soil material has more than 60 percent.
- COLE (coefficient of linear extensibility).** See Linear extensibility.
- Colluvium.** Soil material or rock fragments, or both, moved by creep, slide, or local wash and deposited at the base of steep slopes.
- Complex slope.** Irregular or variable slope. Planning or establishing terraces, diversions, and other water-control structures on a complex slope is difficult.
- Complex, soil.** A map unit of two or more kinds of soil or miscellaneous areas in such an intricate pattern or so small in area that it is not practical to map them separately at the selected scale of mapping. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas.
- Concretions.** Cemented bodies with crude internal symmetry organized around a point, a line, or a plane. They typically take the form of concentric layers visible to the naked eye. Calcium carbonate, iron oxide, and manganese oxide are common compounds making up concretions. If formed in place, concretions of iron oxide or manganese oxide are generally considered a type of redoximorphic concentration.
- Conservation cropping system.** Growing crops in combination with needed cultural and management practices. In a good conservation cropping system, the soil-improving crops and practices more than offset the effects of the soil-depleting crops and practices. Cropping systems are needed on all tilled soils. Soil-improving practices in a conservation cropping system include the use of rotations that contain grasses and legumes and the return of crop residue to the soil. Other practices include the use of green manure crops of grasses and legumes, proper tillage, adequate fertilization, and weed and pest control.
- Conservation tillage.** A tillage system that does not invert the soil and that leaves a protective amount of crop residue on the surface throughout the year.
- Consistence, soil.** Refers to the degree of cohesion and adhesion of soil material and its resistance to deformation when ruptured. Consistence includes resistance of soil material to rupture and to penetration; plasticity, toughness, and stickiness of puddled soil material; and the manner in which the soil material behaves when subject to compression. Terms describing consistence are defined in the "Soil Survey Manual."
- Contour stripcropping.** Growing crops in strips that follow the contour. Strips of grass or close-growing crops are alternated with strips of clean-tilled crops or summer fallow.
- Control section.** The part of the soil on which classification is based. The thickness varies among different kinds of soil, but for many it is that part of the soil profile between depths of 10 inches and 40 or 80 inches.
- Coprogenous earth (sedimentary peat).** Fecal material deposited in water by aquatic organisms.
- Corrosion.** Soil-induced electrochemical or chemical action that dissolves or weakens concrete or uncoated steel.
- Cover crop.** A close-growing crop grown primarily to improve and protect the soil between periods of regular crop production, or a crop grown between trees and vines in orchards and vineyards.
- Crop residue management.** Returning crop residue to the soil, which helps to

maintain soil structure, organic matter content, and fertility and helps to control erosion.

**Cropping system.** Growing crops according to a planned system of rotation and management practices.

**Cross-slope farming.** Deliberately conducting farming operations on sloping farmland in such a way that tillage is across the general slope.

**Crown.** The upper part of a tree or shrub, including the living branches and their foliage.

**Cutbanks cave** (in tables). The walls of excavations tend to cave in or slough.

**Decreasers.** The most heavily grazed climax range plants. Because they are the most palatable, they are the first to be destroyed by overgrazing.

**Deferred grazing.** Postponing grazing or resting grazing land for a prescribed period.

**Delta.** A body of alluvium having a surface that is nearly flat and fan shaped; deposited at or near the mouth of a river or stream where it enters a body of relatively quiet water, generally a sea or lake.

**Depression.** Any relatively sunken part of the earth's surface; especially a low-lying area surrounded by higher ground. A closed depression has no natural outlet for surface drainage.

**Depth, soil.** Generally, the thickness of the soil over bedrock. Very deep soils are more than 60 inches deep over bedrock; deep soils, 40 to 60 inches; moderately deep, 20 to 40 inches; shallow, 10 to 20 inches; and very shallow, less than 10 inches.

**Disintegration moraine.** A drift topography characterized by chaotic mounds and pits, generally randomly oriented, developed in supraglacial drift by collapse and flow as the underlying stagnant ice melted. Slopes may be steep and unstable. Abrupt changes between materials of differing lithology are common.

**Diversion (or diversion terrace).** A ridge of earth, generally a terrace, built to protect downslope areas by diverting runoff from its natural course.

**Drainage class** (natural). Refers to the frequency and duration of wet periods under conditions similar to those under which the soil formed. Alterations of the water regime by human activities, either through drainage or irrigation, are not a consideration unless they have significantly changed the morphology of the soil. Seven classes of natural soil drainage are recognized—*excessively drained, somewhat excessively drained, well drained, moderately well drained, somewhat poorly drained, poorly drained, and very poorly drained*. These classes are defined in the "Soil Survey Manual."

**Drainage, surface.** Runoff, or surface flow of water, from an area.

**Drainageway.** A relatively small, linear depression that, at some time, moves concentrated water and either does not have a defined channel or has only a small defined channel.

**Drumlin.** A low, smooth, elongated oval hill, mound, or ridge of compact glacial till. The longer axis is parallel to the path of the glacier and commonly has a blunt nose pointing in the direction from which the ice approached.

**Duff.** A generally firm organic layer on the surface of mineral soils. It consists of fallen plant material that is in the process of decomposition and includes everything from the litter on the surface to underlying pure humus.

**Eluviation.** The movement of material in true solution or colloidal suspension from one place to another within the soil. Soil horizons that have lost material through eluviation are eluvial; those that have received material are illuvial.

**End moraine.** A ridgelike accumulation that is being or was produced at the outer margin of an actively flowing glacier at any given time.

**Endosaturation.** A type of saturation of the soil in which all horizons between the upper boundary of saturation and a depth of 2 meters are saturated.

**Eolian soil material.** Earthy parent material accumulated through wind action; commonly refers to sandy material in dunes or to loess in blankets on the surface.

- Ephemeral stream.** A stream, or reach of a stream, that flows only in direct response to precipitation. It receives no long-continued supply from melting snow or other source, and its channel is above the water table at all times.
- Episaturation.** A type of saturation indicating a perched water table in a soil in which saturated layers are underlain by one or more unsaturated layers within 2 meters of the surface.
- Erosion.** The wearing away of the land surface by water, wind, ice, or other geologic agents and by such processes as gravitational creep.
- Erosion (geologic).* Erosion caused by geologic processes acting over long geologic periods and resulting in the wearing away of mountains and the building up of such landscape features as flood plains and coastal plains. Synonym: natural erosion.
- Erosion (accelerated).* Erosion much more rapid than geologic erosion, mainly as a result of human or animal activities or of a catastrophe in nature, such as a fire, that exposes the surface.
- Erosion pavement.** A layer of gravel or stones that remains on the surface after fine particles are removed by sheet or rill erosion.
- Escarpment.** A relatively continuous and steep slope or cliff breaking the general continuity of more gently sloping land surfaces and resulting from erosion or faulting. Synonym: scarp.
- Esker.** A narrow, winding ridge of stratified gravelly and sandy drift deposited by a stream flowing in a tunnel beneath a glacier.
- Fan terrace.** A relict alluvial fan, no longer a site of active deposition, incised by younger and lower alluvial surfaces.
- Fertility, soil.** The quality that enables a soil to provide plant nutrients, in adequate amounts and in proper balance, for the growth of specified plants when light, moisture, temperature, tilth, and other growth factors are favorable.
- Fibric soil material (peat).** The least decomposed of all organic soil material. Peat contains a large amount of well preserved fiber that is readily identifiable according to botanical origin. Peat has the lowest bulk density and the highest water content at saturation of all organic soil material.
- Field moisture capacity.** The moisture content of a soil, expressed as a percentage of the oven-dry weight, after the gravitational, or free, water has drained away; the field moisture content 2 or 3 days after a soaking rain; also called *normal field capacity*, *normal moisture capacity*, or *capillary capacity*.
- Fine textured soil.** Sandy clay, silty clay, or clay.
- Firebreak.** An area cleared of flammable material to stop or help control creeping or running fires. It also serves as a line from which to work and to facilitate the movement of firefighters and equipment. Designated roads also serve as firebreaks.
- First bottom.** The normal flood plain of a stream, subject to frequent or occasional flooding.
- Flaggy soil material.** Material that has, by volume, 15 to 35 percent flagstones. Very flaggy soil material has 35 to 60 percent flagstones, and extremely flaggy soil material has more than 60 percent flagstones.
- Flagstone.** A thin fragment of sandstone, limestone, slate, shale, or (rarely) schist 6 to 15 inches (15 to 38 centimeters) long.
- Flood plain.** A nearly level alluvial plain that borders a stream and is subject to flooding unless protected artificially.
- Footslope.** The position that forms the inner, gently inclined surface at the base of a hillslope. In profile, footslopes are commonly concave. A footslope is a transition zone between upslope sites of erosion and transport (shoulders and backslopes) and downslope sites of deposition (toeslopes).
- Forb.** Any herbaceous plant not a grass or a sedge.

- Forest cover.** All trees and other woody plants (underbrush) covering the ground in a forest.
- Forest type.** A stand of trees similar in composition and development because of given physical and biological factors by which it may be differentiated from other stands.
- Fragipan.** A loamy, brittle subsurface horizon low in porosity and content of organic matter and low or moderate in clay but high in silt or very fine sand. A fragipan appears cemented and restricts roots. When dry, it is hard or very hard and has a higher bulk density than the horizon or horizons above. When moist, it tends to rupture suddenly under pressure rather than to deform slowly.
- Frost action** (in tables). Freezing and thawing of soil moisture. Frost action can damage roads, buildings and other structures, and plant roots.
- Genesis, soil.** The mode of origin of the soil. Refers especially to the processes or soil-forming factors responsible for the formation of the solum, or true soil, from the unconsolidated parent material.
- Geomorphology.** The science that treats the general configuration of the earth's surface; specifically, the study of the classification, description, nature, origin, and development of landforms and their relationships to underlying structures, and the history of geologic changes as recorded by these surface features. The term is especially applied to the genetic interpretation of landforms.
- Glacial drift.** Pulverized and other rock material transported by glacial ice and then deposited. Also, the sorted and unsorted material deposited by streams flowing from glaciers.
- Glacial outwash.** Gravel, sand, and silt, commonly stratified, deposited by glacial meltwater.
- Glacial till.** Unsorted, nonstratified glacial drift consisting of clay, silt, sand, and boulders transported and deposited by glacial ice.
- Glaciofluvial deposits.** Material moved by glaciers and subsequently sorted and deposited by streams flowing from the melting ice. The deposits are stratified and occur as kames, eskers, deltas, and outwash plains.
- Glaciolacustrine deposits.** Material ranging from fine clay to sand derived from glaciers and deposited in glacial lakes mainly by glacial meltwater. Many deposits are interbedded or laminated.
- Gleyed soil.** Soil that formed under poor drainage, resulting in the reduction of iron and other elements in the profile and in gray colors.
- Graded stripcropping.** Growing crops in strips that grade toward a protected waterway.
- Grassed waterway.** A natural or constructed waterway, typically broad and shallow, seeded to grass as protection against erosion. Conducts surface water away from cropland.
- Gravel.** Rounded or angular fragments of rock as much as 3 inches (2 millimeters to 7.6 centimeters) in diameter. An individual piece is a pebble.
- Gravelly soil material.** Material that has 15 to 35 percent, by volume, rounded or angular rock fragments, not prominently flattened, as much as 3 inches (7.6 centimeters) in diameter.
- Green manure crop** (agronomy). A soil-improving crop grown to be plowed under in an early stage of maturity or soon after maturity.
- Ground water.** Water filling all the unblocked pores of the material below the water table.
- Gully.** A miniature valley with steep sides cut by running water and through which water ordinarily runs only after rainfall. The distinction between a gully and a rill is one of depth. A gully generally is an obstacle to farm machinery and is too deep to be obliterated by ordinary tillage; a rill is of lesser depth and can be smoothed over by ordinary tillage.

- Hard bedrock.** Bedrock that cannot be excavated except by blasting or by the use of special equipment that is not commonly used in construction.
- Hard to reclaim** (in tables). Reclamation is difficult after the removal of soil for construction and other uses. Revegetation and erosion control are extremely difficult.
- Head slope.** A geomorphic component of hills consisting of a laterally concave area of a hillside, especially at the head of a drainageway. The overland waterflow is converging.
- Hemic soil material (mucky peat).** Organic soil material intermediate in degree of decomposition between the less decomposed fibric material and the more decomposed sapric material.
- Herbaceous peat.** An accumulation of organic material, decomposed to some degree, that is predominantly the remains of sedges, reeds, cattails, and other herbaceous plants.
- High-chroma zones.** Zones having chroma of 3 or more. Typical color in areas of iron concentrations.
- High-residue crops.** Such crops as small grain and corn used for grain. If properly managed, residue from these crops can be used to control erosion until the next crop in the rotation is established. These crops return large amounts of organic matter to the soil.
- Hill.** A natural elevation of the land surface, rising as much as 1,000 feet above surrounding lowlands, commonly of limited summit area and having a well defined outline; hillsides generally have slopes of more than 15 percent. The distinction between a hill and a mountain is arbitrary and is dependent on local usage.
- Horizon, soil.** A layer of soil, approximately parallel to the surface, having distinct characteristics produced by soil-forming processes. In the identification of soil horizons, an uppercase letter represents the major horizons. Numbers or lowercase letters that follow represent subdivisions of the major horizons. An explanation of the subdivisions is given in the "Soil Survey Manual." The major horizons of mineral soil are as follows:
- O horizon.*—An organic layer of fresh and decaying plant residue.
- A horizon.*—The mineral horizon at or near the surface in which an accumulation of humified organic matter is mixed with the mineral material. Also, a plowed surface horizon, most of which was originally part of a B horizon.
- E horizon.*—The mineral horizon in which the main feature is loss of silicate clay, iron, aluminum, or some combination of these.
- B horizon.*—The mineral horizon below an A horizon. The B horizon is in part a layer of transition from the overlying A to the underlying C horizon. The B horizon also has distinctive characteristics, such as (1) accumulation of clay, sesquioxides, humus, or a combination of these; (2) prismatic or blocky structure; (3) redder or browner colors than those in the A horizon; or (4) a combination of these.
- C horizon.*—The mineral horizon or layer, excluding indurated bedrock, that is little affected by soil-forming processes and does not have the properties typical of the overlying soil material. The material of a C horizon may be either like or unlike that in which the solum formed. If the material is known to differ from that in the solum, an Arabic numeral, commonly a 2, precedes the letter C.
- Cr horizon.*—Soft, consolidated bedrock beneath the soil.
- R layer.*—Consolidated bedrock beneath the soil. The bedrock commonly underlies a C horizon, but it can be directly below an A or a B horizon.
- Humus.** The well decomposed, more or less stable part of the organic matter in mineral soils.
- Hydrologic soil groups.** Refers to soils grouped according to their runoff potential. The soil properties that influence this potential are those that affect the minimum rate of water infiltration on a bare soil during periods after prolonged wetting when

the soil is not frozen. These properties are depth to a seasonal high water table, the infiltration rate and permeability after prolonged wetting, and depth to a very slowly permeable layer. The slope and the kind of plant cover are not considered but are separate factors in predicting runoff.

**Ice-walled lake plain.** A relict surface marking the floor of an extinct lake basin that was formed on solid ground and surrounded by stagnant ice in a stable or unstable superglacial environment on stagnation moraines. As the ice melted, the lake plain became perched above the adjacent landscape. The lake plain is well sorted, generally fine textured, stratified deposits.

**Igneous rock.** Rock formed by solidification from a molten or partially molten state. Major varieties include plutonic and volcanic rock. Examples are andesite, basalt, and granite.

**Illuviation.** The movement of soil material from one horizon to another in the soil profile. Generally, material is removed from an upper horizon and deposited in a lower horizon.

**Impervious soil.** A soil through which water, air, or roots penetrate slowly or not at all. No soil is absolutely impervious to air and water all the time.

**Increasesers.** Species in the climax vegetation that increase in amount as the more desirable plants are reduced by close grazing. Increasesers commonly are the shorter plants and the less palatable to livestock.

**Infiltration.** The downward entry of water into the immediate surface of soil or other material, as contrasted with percolation, which is movement of water through soil layers or material.

**Infiltration capacity.** The maximum rate at which water can infiltrate into a soil under a given set of conditions.

**Infiltration rate.** The rate at which water penetrates the surface of the soil at any given instant, usually expressed in inches per hour. The rate can be limited by the infiltration capacity of the soil or the rate at which water is applied at the surface.

**Intake rate.** The average rate of water entering the soil under irrigation. Most soils have a fast initial rate; the rate decreases with application time. Therefore, intake rate for design purposes is not a constant but is a variable depending on the net irrigation application. The rate of water intake, in inches per hour, is expressed as follows:

Less than 0.2 .....	very low
0.2 to 0.4 .....	low
0.4 to 0.75 .....	moderately low
0.75 to 1.25 .....	moderate
1.25 to 1.75 .....	moderately high
1.75 to 2.5 .....	high
More than 2.5 .....	very high

**Interfluve.** An elevated area between two drainageways that sheds water to those drainageways.

**Intermittent stream.** A stream, or reach of a stream, that flows for prolonged periods only when it receives ground-water discharge or long, continued contributions from melting snow or other surface and shallow subsurface sources.

**Invaders.** On range, plants that encroach into an area and grow after the climax vegetation has been reduced by grazing. Generally, plants invade following disturbance of the surface.

**Iron concentrations.** High-chroma zones having a high content of iron and manganese oxide because of chemical oxidation and accumulation, but having a clay content similar to that of the adjacent matrix. A type of redoximorphic concentration.

**Iron depletions.** Low-chroma zones having a low content of iron and manganese

oxide because of chemical reduction and removal, but having a clay content similar to that of the adjacent matrix. A type of redoximorphic depletion.

**Irrigation.** Application of water to soils to assist in production of crops. Methods of irrigation are:

*Basin.*—Water is applied rapidly to nearly level plains surrounded by levees or dikes.

*Border.*—Water is applied at the upper end of a strip in which the lateral flow of water is controlled by small earth ridges called border dikes, or borders.

*Controlled flooding.*—Water is released at intervals from closely spaced field ditches and distributed uniformly over the field.

*Corrugation.*—Water is applied to small, closely spaced furrows or ditches in fields of close-growing crops or in orchards so that it flows in only one direction.

*Drip (or trickle).*—Water is applied slowly and under low pressure to the surface of the soil or into the soil through such applicators as emitters, porous tubing, or perforated pipe.

*Furrow.*—Water is applied in small ditches made by cultivation implements. Furrows are used for tree and row crops.

*Sprinkler.*—Water is sprayed over the soil surface through pipes or nozzles from a pressure system.

*Subirrigation.*—Water is applied in open ditches or tile lines until the water table is raised enough to wet the soil.

*Wild flooding.*—Water, released at high points, is allowed to flow onto an area without controlled distribution.

**Kame.** An irregular, short ridge or hill of stratified glacial drift.

**Kame moraine.** An end moraine that contains numerous kames. A group of kames along the front of a stagnant glacier, commonly comprising the slumped remnants of a formerly continuous outwash plain built up over the foot of rapidly wasting or stagnant ice.

**Karst** (topography). The relief of an area underlain by limestone that dissolves in differing degrees, thus forming numerous depressions or small basins.

**Knoll.** A small, low, rounded hill rising above adjacent landforms.

**$K_{sat}$ .** Saturated hydraulic conductivity. (See Permeability.)

**Lacustrine deposit.** Material deposited in lake water and exposed when the water level is lowered or the elevation of the land is raised.

**Lake bed.** The bottom of a lake; a lake basin.

**Lake plain.** A nearly level surface marking the floor of an extinct lake filled by well sorted, generally fine textured, stratified deposits, commonly containing varves.

**Lake terrace.** A narrow shelf, partly cut and partly built, produced along a lakeshore in front of a scarp line of low cliffs and later exposed when the water level falls.

**Lakeshore.** A narrow strip of land in contact with or bordering a lake; especially the beach of a lake.

**Lamella.** A thin (commonly less than 1 cm thick), discontinuous or continuous, generally horizontal layer of fine material (especially clay and iron oxides) that has been pedogenically concentrated (illuviated within a coarser textured eluviated layer several centimeters to several decimeters thick).

**Landslide.** The rapid downhill movement of a mass of soil and loose rock, generally when wet or saturated. The speed and distance of movement, as well as the amount of soil and rock material, vary greatly.

**Leaching.** The removal of soluble material from soil or other material by percolating water.

**Linear extensibility.** Refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. Linear extensibility is used to determine the shrink-swell potential of soils. It is an expression of the volume change between the water content of the clod at  $1/3$ - or  $1/10$ -bar tension (33kPa or

10kPa tension) and oven dryness. Volume change is influenced by the amount and type of clay minerals in the soil. The volume change is the percent change for the whole soil. If it is expressed as a fraction, the resulting value is COLE, coefficient of linear extensibility.

**Liquid limit.** The moisture content at which the soil passes from a plastic to a liquid state.

**Loam.** Soil material that is 7 to 27 percent clay particles, 28 to 50 percent silt particles, and less than 52 percent sand particles.

**Loess.** Fine grained material, dominantly of silt-sized particles, deposited by wind.

**Low strength.** The soil is not strong enough to support loads.

**Low-chroma zones.** Zones having chroma of 2 or less. Typical color in areas of iron depletions.

**Low-residue crops.** Such crops as corn used for silage, peas, beans, and potatoes. Residue from these crops is not adequate to control erosion until the next crop in the rotation is established. These crops return little organic matter to the soil.

**Marl.** An earthy, unconsolidated deposit consisting chiefly of calcium carbonate mixed with clay in approximately equal amounts.

**Masses.** Concentrations of substances in the soil matrix that do not have a clearly defined boundary with the surrounding soil material and cannot be removed as a discrete unit. Common compounds making up masses are calcium carbonate, gypsum or other soluble salts, iron oxide, and manganese oxide. Masses consisting of iron oxide or manganese oxide generally are considered a type of redoximorphic concentration.

**Mechanical treatment.** Use of mechanical equipment for seeding, brush management, and other management practices.

**Medium textured soil.** Very fine sandy loam, loam, silt loam, or silt.

**Metamorphic rock.** Rock of any origin altered in mineralogical composition, chemical composition, or structure by heat, pressure, and movement. Nearly all such rocks are crystalline.

**Mineral soil.** Soil that is mainly mineral material and low in organic material. Its bulk density is more than that of organic soil.

**Minimum tillage.** Only the tillage essential to crop production and prevention of soil damage.

**Miscellaneous area.** An area that has little or no natural soil and supports little or no vegetation.

**Moderately coarse textured soil.** Coarse sandy loam, sandy loam, or fine sandy loam.

**Moderately fine textured soil.** Clay loam, sandy clay loam, or silty clay loam.

**Mollic epipedon.** A thick, dark, humus-rich surface horizon (or horizons) that has high base saturation and pedogenic soil structure. It may include the upper part of the subsoil.

**Moraine.** An accumulation of earth, stones, and other debris deposited by a glacier. Some types are terminal, lateral, medial, and ground.

**Morphology, soil.** The physical makeup of the soil, including the texture, structure, porosity, consistence, color, and other physical, mineral, and biological properties of the various horizons, and the thickness and arrangement of those horizons in the soil profile.

**Mottling, soil.** Irregular spots of different colors that vary in number and size. Descriptive terms are as follows: abundance—*few*, *common*, and *many*; size—*fine*, *medium*, and *coarse*; and contrast—*faint*, *distinct*, and *prominent*. The size measurements are of the diameter along the greatest dimension. *Fine* indicates less than 5 millimeters (about 0.2 inch); *medium*, from 5 to 15 millimeters (about 0.2 to 0.6 inch); and *coarse*, more than 15 millimeters (about 0.6 inch).

- Muck.** Dark, finely divided, well decomposed organic soil material. (See Sapric soil material.)
- Mucky peat.** Unconsolidated soil material consisting primarily of organic matter that is in an intermediate stage of decomposition such that a significant part of the material can be recognized and a significant part of the material cannot be recognized.
- Mudstone.** Sedimentary rock formed by induration of silt and clay in approximately equal amounts.
- Munsell notation.** A designation of color by degrees of three simple variables—hue, value, and chroma. For example, a notation of 10YR 6/4 is a color with hue of 10YR, value of 6, and chroma of 4.
- Neutral soil.** A soil having a pH value of 6.6 to 7.3. (See Reaction, soil.)
- Nodules.** Cemented bodies lacking visible internal structure. Calcium carbonate, iron oxide, and manganese oxide are common compounds making up nodules. If formed in place, nodules of iron oxide or manganese oxide are considered types of redoximorphic concentrations.
- Nose slope.** A geomorphic component of hills consisting of the projecting end (laterally convex area) of a hillside. The overland waterflow is predominantly divergent.
- Nutrient, plant.** Any element taken in by a plant essential to its growth. Plant nutrients are mainly nitrogen, phosphorus, potassium, calcium, magnesium, sulfur, iron, manganese, copper, boron, and zinc obtained from the soil and carbon, hydrogen, and oxygen obtained from the air and water.
- Organic matter.** Plant and animal residue in the soil in various stages of decomposition. The content of organic matter in the surface layer is described as follows:
- |                      |                       |
|----------------------|-----------------------|
| Very low .....       | less than 0.5 percent |
| Low .....            | 0.5 to 1.0 percent    |
| Moderately low ..... | 1.0 to 2.0 percent    |
| Moderate .....       | 2.0 to 4.0 percent    |
| High .....           | 4.0 to 8.0 percent    |
| Very high .....      | more than 8.0 percent |
- Outwash plain.** A landform of mainly sandy or coarse textured material of glaciofluvial origin. An outwash plain is commonly smooth; where pitted, it generally is low in relief.
- Paleoterrace.** An erosional remnant of a terrace that retains the surface form and alluvial deposits of its origin but was not emplaced by, and commonly does not grade to, a present-day stream or drainage network.
- Parent material.** The unconsolidated organic and mineral material in which soil forms.
- Peat.** Unconsolidated material, largely undecomposed organic matter, that has accumulated under excess moisture. (See Fibric soil material.)
- Ped.** An individual natural soil aggregate, such as a granule, a prism, or a block.
- Pedisediment.** A thin layer of alluvial material that mantles an erosion surface and has been transported to its present position from higher lying areas of the erosion surface.
- Pedon.** The smallest volume that can be called “a soil.” A pedon is three dimensional and large enough to permit study of all horizons. Its area ranges from about 10 to 100 square feet (1 square meter to 10 square meters), depending on the variability of the soil.
- Percolation.** The movement of water through the soil.
- Permeability.** The quality of the soil that enables water or air to move downward through the profile. The rate at which a saturated soil transmits water is accepted

as a measure of this quality. In soil physics, the rate is referred to as “saturated hydraulic conductivity,” which is defined in the “Soil Survey Manual.” In line with conventional usage in the engineering profession and with traditional usage in published soil surveys, this rate of flow continues to be expressed as “permeability.” Terms describing permeability, measured in inches per hour, are as follows:

Impermeable .....	less than 0.0015 inch
Very slow .....	0.0015 to 0.06 inch
Slow .....	0.06 to 0.2 inch
Moderately slow .....	0.2 to 0.6 inch
Moderate .....	0.6 inch to 2.0 inches
Moderately rapid .....	2.0 to 6.0 inches
Rapid .....	6.0 to 20 inches
Very rapid .....	more than 20 inches

- pH value.** A numerical designation of acidity and alkalinity in soil. (See Reaction, soil.)
- Phase, soil.** A subdivision of a soil series based on features that affect its use and management, such as slope, stoniness, and flooding.
- Piping** (in tables). Formation of subsurface tunnels or pipelike cavities by water moving through the soil.
- Pitted outwash plain.** An outwash plain marked by many irregular depressions, such as kettles, shallow pits, and potholes, which formed by melting of incorporated ice masses; common in Wisconsin and Minnesota.
- Plastic limit.** The moisture content at which a soil changes from semisolid to plastic.
- Plasticity index.** The numerical difference between the liquid limit and the plastic limit; the range of moisture content within which the soil remains plastic.
- Plateau.** An extensive upland mass with relatively flat summit area that is considerably elevated (more than 100 meters) above adjacent lowlands and separated from them on one or more sides by escarpments.
- Ponding.** Standing water on soils in closed depressions. Unless the soils are artificially drained, the water can be removed only by percolation or evapotranspiration.
- Poorly graded.** Refers to a coarse grained soil or soil material consisting mainly of particles of nearly the same size. Because there is little difference in size of the particles, density can be increased only slightly by compaction.
- Potential native plant community.** See Climax plant community.
- Potential rooting depth (effective rooting depth).** Depth to which roots could penetrate if the content of moisture in the soil were adequate. The soil has no properties restricting the penetration of roots to this depth.
- Prescribed burning.** Deliberately burning an area for specific management purposes, under the appropriate conditions of weather and soil moisture and at the proper time of day.
- Productivity, soil.** The capability of a soil for producing a specified plant or sequence of plants under specific management.
- Profile, soil.** A vertical section of the soil extending through all its horizons and into the parent material.
- Proper grazing use.** Grazing at an intensity that maintains enough cover to protect the soil and maintain or improve the quantity and quality of the desirable vegetation. This practice increases the vigor and reproduction capacity of the key plants and promotes the accumulation of litter and mulch necessary to conserve soil and water.
- Reaction, soil.** A measure of acidity or alkalinity of a soil, expressed in pH values. A soil that tests to pH 7.0 is described as precisely neutral in reaction because it is

neither acid nor alkaline. The degrees of acidity or alkalinity, expressed as pH values, are:

Ultra acid .....	less than 3.5
Extremely acid .....	3.5 to 4.4
Very strongly acid .....	4.5 to 5.0
Strongly acid .....	5.1 to 5.5
Moderately acid .....	5.6 to 6.0
Slightly acid .....	6.1 to 6.5
Neutral .....	6.6 to 7.3
Slightly alkaline .....	7.4 to 7.8
Moderately alkaline .....	7.9 to 8.4
Strongly alkaline .....	8.5 to 9.0
Very strongly alkaline .....	9.1 and higher

**Redoximorphic concentrations.** Nodules, concretions, soft masses, pore linings, and other features resulting from the accumulation of iron or manganese oxide. An indication of chemical reduction and oxidation resulting from saturation.

**Redoximorphic depletions.** Low-chroma zones from which iron and manganese oxide or a combination of iron and manganese oxide and clay has been removed. These zones are indications of the chemical reduction of iron resulting from saturation.

**Redoximorphic features.** Redoximorphic concentrations, redoximorphic depletions, reduced matrices, a positive reaction to alpha,alpha-dipyridyl, and other features indicating the chemical reduction and oxidation of iron and manganese compounds resulting from saturation.

**Reduced matrix.** A soil matrix that has low chroma in situ because of chemically reduced iron (Fe II). The chemical reduction results from nearly continuous wetness. The matrix undergoes a change in hue or chroma within 30 minutes after exposure to air as the iron is oxidized (Fe III). A type of redoximorphic feature.

**Regolith.** The unconsolidated mantle of weathered rock and soil material on the earth's surface; the loose earth material above the solid rock.

**Relief.** The elevations or inequalities of a land surface, considered collectively.

**Residuum (residual soil material).** Unconsolidated, weathered or partly weathered mineral material that accumulated as consolidated rock disintegrated in place.

**Rill.** A steep-sided channel resulting from accelerated erosion. A rill generally is a few inches deep and not wide enough to be an obstacle to farm machinery.

**Rise.** A slight increase in elevation of the land surface, typically with a broad summit and gently sloping sides.

**Road cut.** A sloping surface produced by mechanical means during road construction. It is commonly on the uphill side of the road.

**Rock fragments.** Rock or mineral fragments having a diameter of 2 millimeters or more; for example, pebbles, cobbles, stones, and boulders.

**Root zone.** The part of the soil that can be penetrated by plant roots.

**Runoff.** The precipitation discharged into stream channels from an area. The water that flows off the surface of the land without sinking into the soil is called surface runoff. Water that enters the soil before reaching surface streams is called groundwater runoff or seepage flow from ground water.

**Saline soil.** A soil containing soluble salts in an amount that impairs growth of plants. A saline soil does not contain excess exchangeable sodium.

**Sand.** As a soil separate, individual rock or mineral fragments from 0.05 millimeter to 2.0 millimeters in diameter. Most sand grains consist of quartz. As a soil textural class, a soil that is 85 percent or more sand and not more than 10 percent clay.

**Sandstone.** Sedimentary rock containing dominantly sand-sized particles.

**Sapric soil material (muck).** The most highly decomposed of all organic soil material.

Muck has the least amount of plant fiber, the highest bulk density, and the lowest water content at saturation of all organic soil material.

**Saprolite.** Unconsolidated residual material underlying the soil and grading to hard bedrock below.

**Saturated hydraulic conductivity ( $K_{sat}$ ).** See Permeability.

**Saturation.** Wetness characterized by zero or positive pressure of the soil water.

Under conditions of saturation, the water will flow from the soil matrix into an unlined auger hole.

**Scarification.** The act of abrading, scratching, loosening, crushing, or modifying the surface to increase water absorption or to provide a more tillable soil.

**Second bottom.** The first terrace above the normal flood plain (or first bottom) of a river.

**Sedimentary rock.** Rock made up of particles deposited from suspension in water.

The chief kinds of sedimentary rock are conglomerate, formed from gravel; sandstone, formed from sand; shale, formed from clay; and limestone, formed from soft masses of calcium carbonate. There are many intermediate types. Some wind-deposited sand is consolidated into sandstone.

**Seepage** (in tables). The movement of water through the soil adversely affects the specified use.

**Sequum.** A sequence consisting of an illuvial horizon and the overlying eluvial horizon. (See Eluviation.)

**Series, soil.** A group of soils that have profiles that are almost alike, except for differences in texture of the surface layer. All the soils of a series have horizons that are similar in composition, thickness, and arrangement.

**Shale.** Sedimentary rock formed by the hardening of a clay deposit.

**Sheet erosion.** The removal of a fairly uniform layer of soil material from the land surface by the action of rainfall and surface runoff.

**Shoulder.** The position that forms the uppermost inclined surface near the top of a hillslope. It is a transition from backslope to summit. The surface is dominantly convex in profile and erosional in origin.

**Shrink-swell** (in tables). The shrinking of soil when dry and the swelling when wet. Shrinking and swelling can damage roads, dams, building foundations, and other structures. It can also damage plant roots.

**Side slope.** A geomorphic component of hills consisting of a laterally planar area of a hillside. The overland waterflow is predominantly parallel.

**Silica.** A combination of silicon and oxygen. The mineral form is called quartz.

**Silt.** As a soil separate, individual mineral particles that range in diameter from the upper limit of clay (0.002 millimeter) to the lower limit of very fine sand (0.05 millimeter). As a soil textural class, soil that is 80 percent or more silt and less than 12 percent clay.

**Siltstone.** Sedimentary rock made up of dominantly silt-sized particles.

**Similar soils.** Soils that share limits of diagnostic criteria, behave and perform in a similar manner, and have similar conservation needs or management requirements for the major land uses in the survey area.

**Sinkhole.** A depression in the landscape where limestone has been dissolved.

**Slickensides.** Polished and grooved surfaces produced by one mass sliding past another. In soils, slickensides may occur at the bases of slip surfaces on the steeper slopes; on faces of blocks, prisms, and columns; and in swelling clayey soils, where there is marked change in moisture content.

**Slope.** The inclination of the land surface from the horizontal. Percentage of slope is the vertical distance divided by horizontal distance, then multiplied by 100. Thus, a slope of 20 percent is a drop of 20 feet in 100 feet of horizontal distance.

- Slope** (in tables). Slope is great enough that special practices are required to ensure satisfactory performance of the soil for a specific use.
- Sloughed till.** Water-saturated till that has flowed slowly downhill from its original place of deposit by glacial ice. It may rest on other till, on glacial outwash, or on a glaciolacustrine deposit.
- Slow refill** (in tables). The slow filling of ponds, resulting from restricted permeability in the soil.
- Sodium adsorption ratio (SAR).** A measure of the amount of sodium (Na) relative to calcium (Ca) and magnesium (Mg) in the water extract from saturated soil paste. It is the ratio of the Na concentration divided by the square root of one-half of the Ca + Mg concentration.
- Soft bedrock.** Bedrock that can be excavated with trenching machines, backhoes, small rippers, and other equipment commonly used in construction.
- Soil.** A natural, three-dimensional body at the earth's surface. It is capable of supporting plants and has properties resulting from the integrated effect of climate and living matter acting on earthy parent material, as conditioned by relief and by the passage of time.
- Soil separates.** Mineral particles less than 2 millimeters in equivalent diameter and ranging between specified size limits. The names and sizes, in millimeters, of separates recognized in the United States are as follows:
- |                        |                 |
|------------------------|-----------------|
| Very coarse sand ..... | 2.0 to 1.0      |
| Coarse sand .....      | 1.0 to 0.5      |
| Medium sand .....      | 0.5 to 0.25     |
| Fine sand .....        | 0.25 to 0.10    |
| Very fine sand .....   | 0.10 to 0.05    |
| Silt .....             | 0.05 to 0.002   |
| Clay .....             | less than 0.002 |
- Solum.** The upper part of a soil profile, above the C horizon, in which the processes of soil formation are active. The solum in soil consists of the A, E, and B horizons. Generally, the characteristics of the material in these horizons are unlike those of the material below the solum. The living roots and plant and animal activities are largely confined to the solum.
- Stagnation moraine.** A body of drift released by the melting of a glacier that ceased flowing. Commonly, but not always, occurs near ice margins; composed of till, ice-contact stratified drift, and small areas of glacial lake sediment. Typical landforms are knob-and-kettle topography, locally including ice-walled lake plains.
- Stone line.** A concentration of rock fragments in a soil. Generally, it is indicative of an old weathered surface. In a cross section, the line may be one fragment or more thick. It generally overlies material that weathered in place and is overlain by recent sediment of variable thickness.
- Stones.** Rock fragments 10 to 24 inches (25 to 60 centimeters) in diameter if rounded or 15 to 24 inches (38 to 60 centimeters) in length if flat.
- Stony.** Refers to a soil containing stones in numbers that interfere with or prevent tillage.
- Stripcropping.** Growing crops in a systematic arrangement of strips or bands that provide vegetative barriers to wind erosion and water erosion.
- Structure, soil.** The arrangement of primary soil particles into compound particles or aggregates. The principal forms of soil structure are—*platy* (laminated), *prismatic* (vertical axis of aggregates longer than horizontal), *columnar* (prisms with rounded tops), *blocky* (angular or subangular), and *granular*. *Structureless* soils are either *single grained* (each grain by itself, as in dune sand) or *massive* (the particles adhering without any regular cleavage, as in many hardpans).

- Stubble mulch.** Stubble or other crop residue left on the soil or partly worked into the soil. It protects the soil from wind erosion and water erosion after harvest, during preparation of a seedbed for the next crop, and during the early growing period of the new crop.
- Subsidence.** The potential decrease in surface elevation as a result of the drainage of wet soils that have organic layers or semifluid mineral layers. Subsidence, as a result of drainage, is attributed to (1) shrinkage from drying, (2) consolidation because of the loss of ground-water buoyancy, (3) compaction from tillage or manipulation, (4) wind erosion, (5) burning, and (6) biochemical oxidation.
- Subsoil.** Technically, the B horizon; roughly, the part of the solum below plow depth.
- Subsoiling.** Tilling a soil below normal plow depth, ordinarily to shatter or loosen a layer that restricts roots.
- Substratum.** The part of the soil below the solum.
- Subsurface layer.** Any surface soil horizon (A, E, AB, or EB) below the surface layer.
- Summit.** The topographically highest position of a hillslope. It has a nearly level (planar or only slightly convex) surface.
- Surface layer.** The soil ordinarily moved in tillage, or its equivalent in uncultivated soil, ranging in depth from 4 to 10 inches (10 to 25 centimeters). Frequently designated as the "plow layer," or the "Ap horizon."
- Surface soil.** The A, E, AB, and EB horizons, considered collectively. It includes all subdivisions of these horizons.
- Swale.** A slight depression in the midst of generally level land. A shallow depression in an undulating ground moraine caused by uneven glacial deposition.
- Terminal moraine.** A belt of thick glacial drift that generally marks the termination of important glacial advances.
- Terrace.** An embankment, or ridge, constructed across sloping soils on the contour or at a slight angle to the contour. The terrace intercepts surface runoff so that water soaks into the soil or flows slowly to a prepared outlet. A terrace in a field generally is built so that the field can be farmed. A terrace intended mainly for drainage has a deep channel that is maintained in permanent sod.
- Terrace (geologic).** An old alluvial plain, ordinarily flat or undulating, bordering a river, a lake, or the sea.
- Texture, soil.** The relative proportions of sand, silt, and clay particles in a mass of soil. The basic textural classes, in order of increasing proportion of fine particles, are *sand, loamy sand, sandy loam, loam, silt loam, silt, sandy clay loam, clay loam, silty clay loam, sandy clay, silty clay,* and *clay*. The sand, loamy sand, and sandy loam classes may be further divided by specifying "coarse," "fine," or "very fine."
- Till plain.** An extensive area of nearly level to undulating soils underlain by glacial till.
- Tilth, soil.** The physical condition of the soil as related to tillage, seedbed preparation, seedling emergence, and root penetration.
- Toeslope.** The position that forms the gently inclined surface at the base of a hillslope. Toeslopes in profile are commonly gentle and linear and are constructional surfaces forming the lower part of a hillslope continuum that grades to valley or closed-depression floors.
- Topsoil.** The upper part of the soil, which is the most favorable material for plant growth. It is ordinarily rich in organic matter and is used to topdress roadbanks, lawns, and land affected by mining.
- Trace elements.** Chemical elements, for example, zinc, cobalt, manganese, copper, and iron, in soils in extremely small amounts. They are essential to plant growth.
- Upland.** Land at a higher elevation, in general, than the alluvial plain or stream terrace; land above the lowlands along streams.
- Valley fill.** In glaciated regions, material deposited in stream valleys by glacial meltwater. In nonglaciated regions, alluvium deposited by heavily loaded streams.

**Variiegation.** Refers to patterns of contrasting colors assumed to be inherited from the parent material rather than to be the result of poor drainage.

**Water bars.** Smooth, shallow ditches or depressional areas that are excavated at an angle across a sloping road. They are used to reduce the downward velocity of water and divert it off and away from the road surface. Water bars can easily be driven over if constructed properly.

**Weathering.** All physical and chemical changes produced in rocks or other deposits at or near the earth's surface by atmospheric agents. These changes result in disintegration and decomposition of the material.

**Well graded.** Refers to soil material consisting of coarse grained particles that are well distributed over a wide range in size or diameter. Such soil normally can be easily increased in density and bearing properties by compaction. Contrasts with poorly graded soil.

**Wilting point (or permanent wilting point).** The moisture content of soil, on an oven-dry basis, at which a plant (specifically a sunflower) wilts so much that it does not recover when placed in a humid, dark chamber.

**Windthrow.** The uprooting and tipping over of trees by the wind.

**Woody peat.** An accumulation of organic material that is predominantly composed of trees, shrubs, and other woody plants.